



# Trade figures may be wrong

BY SAMUEL BRITTON

ONE OF THE economic sensations of 1969 was the announcement on June 12 of that year disclosing a large amount of "missing exports" which, owing to a simplification of Customs procedure had passed unrecorded. The sum involved amounted to over £600m. for 1968, an enormous amount for that period. The revelation of these exports, together with an improvement in the trade figures themselves, was decisive in the recovery of confidence in sterling after the Callaghan devaluation.

It would be irresponsible to assert with any confidence that a similar error is about to be discovered. But it is well known in Whitehall that the recording of exports and imports is prone to error during periods of rapidly changing exchange rates and an investigation is being made. The official view still is that errors are likely in either direction; but the odds are slightly in favour of the trade deficit having been overstated rather than understated. If so, the story this time will be that of the non-existent imports.

## Less shock

If the error turns out to be on the scale of 1968, a considerable part of the current deficit of £1.5bn. incurred in 1976 would disappear; the January trade figures will be a little less of a shock and the move into surplus could come earlier in 1977 than the official forecast suggests, even if every element in that forecast other than the base line proves correct.

A consultant economist, Mr. A. G. Hornsall, has devoted particular efforts to establishing the case that imports have been overstated. The basic point is that imports expressed in foreign currency are converted into sterling at rates prevailing when the documents are presented for Customs clearance. If the currency has been bought forward, this is not the rate which the importer has actually paid.

During most of 1976 the forward discount on sterling was less than the average rate of depreciation. This meant that imports paid less for the goods than the trade figures suggest. It also suggests that operations in the foreign exchange markets, so far from speculating against sterling, lost money by underestimating its decline, but that is another subject.)

Mr. Hornsall cites data to suggest that 70 per cent of imports are invoiced in foreign currency. He argues, on the basis of a small sample investigation of his own, that nearly a third of these, or just over 20 per cent of total imports, were covered by forward purchases of foreign currency. During 1976 the average

## Overstatement

Sterling's discount against the dollar fluctuated between less than 4 per cent and more than 15 per cent per annum. Mr. Hornsall estimates an average of 9.4 per cent per month. The overstatement of imports per month of forward contract is thus very approximately some 1.6 per cent in foreign exchange savings minus just over 0.8 per cent for the cost of forward cover—making just over 1 per cent. One then still has to guess how far ahead the forward contracts run. Mr. Hornsall suggests that three months is a minimum and that total to eight months is frequent. If we take five months as the middle of the range, then there was an overstatement of 5 per cent.

Total imports last year came to £28bn. If 5% of these were brought forward and invoiced in foreign currency, then the overstatement of imports might have been £300m, equivalent to £25m per month. This could be too conservative an estimate.

The averaging procedure may have underestimated the effects of the periods of exceptionally severe fall in sterling's value, and the use of dollar calculations may also bias the estimate downwards. On the other hand, the forward sale of sterling by sellers of goods invoiced in foreign exchange may lead to an underestimation of the sterling value of exports. There is some evidence that there is more of this activity on the import side.

In the last resort it does not matter much. Any overstatement of imports is automatically compensated for by a favourable movement in the capital account—probably in the balancing item or in trade credit. The important indicators are the changes in the exchange rate, reserves, losses or gains, and official foreign currency borrowing. All the rest consists of statistical attempts to break down the total currency flow—imported at the best of times and far more so during hectic changes. The trade figures matter only in so far as news of them gives rise to capital movements which would not otherwise take place, and if we in Britain took less notice of them so I am sure the foreign exchange market would be the foreign exchange market.

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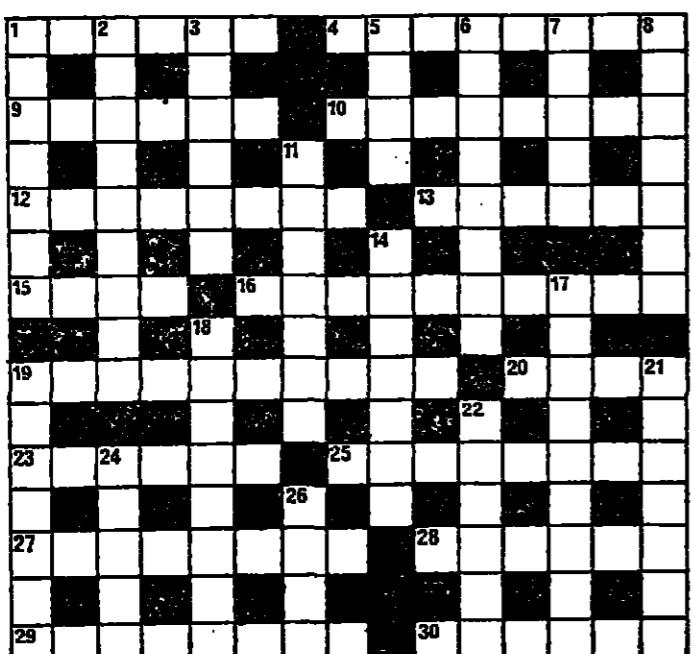
## TV Radio

Indicates programme in black and white

**BBC 1**

6.40-7.55 a.m. Open University (UHF only). 9.30 For Schools, Colleges. 10.45 You And Me. 11.00 For Schools, Colleges. 12.45 p.m. News. 1.00 Pebble Mill. 1.45 The Flumps. 2.01 For Schools, Colleges. 2.15 Songs of Praise. 3.35 Regional News (except London). 3.55 Play School. 4.20 It's the Wolf. 4.25 Jackanory. 4.40 Blue Peter. 5.05 John Craven's Newsround. 5.10 It's Our Turn. 5.35 Paddington. 5.40 News. 5.55 Nationwide (London and South-East only). 6.20 Nationwide.

**F.T. CROSSWORD PUZZLE No. 3.311**



**ACROSS**

- Everyone who drives a car must face this board (6)
- Pay rates changed in the last twelve months (4, 4)
- There is flippancy, it appears, in tax (6)
- The girl goes below to fish (8)
- Mistake an effort in rambling (6)
- A gem to mark a sailor (6)
- It's a bird—put that in your pipe (4)
- Beginning to stop on the South coast (5, 5)
- Scrap metal in arguing the point (4, 3, 3)
- A brief period of quiet in the sick-bay (4)
- Dickey for a hungry Tommy (6)
- Strainer for one who dis-enarks with you (8)
- China on the wing—that is causing trepidation (6)
- When turns up in Far East (6)
- "Think you I am no— than my sex" (J.C.) (5)
- Something from the grill includes the right strain (6)

**DOWN**

- Bands to satisfy the crazy gang (7)
- Hail the Navy in behalf of the Forest (8)
- Design in canvas (6)
- Normally without a standard assistant (4)
- You crept about in genuine imitation (4, 4)
- The witch's place (5)
- Savourey started by the Welsh (7)
- Preceded a request in Victoria times (7)
- Debate after tea means disloyalty (7)
- Portrayed with dignity (9)
- "I thank Thee that I am not as— (N.T.) (5, 3)
- A girl to share the sword (7)
- The county has no right to people (7)
- Partnership causes accountant to express derision (6)
- Preside at the final shock in America (6)
- Formerly the start of the fairy story (4)
- The solution of last Saturday's prize puzzle will be published with names of winners next Saturday.

## THE WEEK IN THE COURTS

# Ruritanian income and U.K. tax

BY RUTHERFORD

INCOME ARISING outside the United Kingdom and paid to a person not resident within the United Kingdom escapes U.K. income tax. Were it not for a provision in the U.K. income tax legislation, tax could be avoided by a U.K. resident transferring the content of the Revenue, income-producing property to an foreign company and thus enjoying the income abroad. But proper expenses of managing where any individual ordinarily resident in the U.K. has what Lord Chetwode contend. Lord Chetwode acquired any rights by virtue of which he has power to enjoy the income, such income is treated as his income for all the purposes of the Income Tax Acts. There are certain specific exemptions where tax avoidance was not the purpose for which the transfer was effected or where the transfer was a bona fide commercial transaction.

## Expenses

The intriguing question that the House of Lords grappled with in Lord Chetwode v. Inland Revenue Commissioners was whether one could compute the income of a Ruritanian company by reference to the law of Ruritania. The answer their Lordships unanimously gave in reversing the Court of Appeal was that income did not have to be deducted from the gross income.

## Authority

Lord Wilberforce began his eloquent judgment by tactfully and graciously commanding the view taken by the Court of Appeal, which he proceeded to destroy so convincingly, as clearly having "immense" attraction, "because at first sight one had to do was to look at BIC's revenue accounts for any year and see what, in revenue terms, was the outcome. But the matter was not quite so simple. A U.K. individual is not allowed to set against his investment income any expenses of the kind that BIC incurred. To permit their deduction after the kind of transfer abroad which Parliament was trying to prevent would seem to achieve a sort of reverse result. Did the language of the legislature allow that result?

The starting point to answering that question was a classic quote for a judgment of Lord Radcliffe, that great authority

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The facts in Lord Chetwode's case were simple and not in dispute. He transferred £16,119 to a trust corporation abroad to a trust of a settlement over which he retained control. The corporation bought all the shares of a Bahamian investment company (BIC, for short) to which it lent the rest of the trust funds. BIC invested in foreign stocks and shares on which it assessment by such deductions as the severest of penalties) there got dividends. BIC also incurred only as are actually specified for still stands.

in the tax code, or are granted by way of relief. If one applied those words to the foreign dividends of the kind which BIC received, one had to start from the point that they were "income", and in particular, whether received by an individual or a company, they were "income" arising from foreign possessions out of the U.K." taxed as such under Case V of Schedule D.

## Common sense

Lord Wilberforce could see only two arguments available to Lord Chetwode to negative that approach. The first was the line abandoned by Lord Chetwode's

counsel, that one looked to Ruritanian law as opposed to English law, as expounded in the Radcliffe pronouncement. The only other argument, advanced with some force, was that "income" had to be computed with reference to "general principles" namely, accepted principles of commercial accounting, according to which, it was claimed, one can never compute a company's income without first deducting its proper expenses.

Lord Wilberforce rejected this argument. He could find no principle upon which to decide whether, for tax purposes and in relation to investment income, any and if so what, deductions ought to be made. He added tersely: "There is no common law, or common sense or common practice in such a matter." Finally, Lord Wilberforce dealt with two subsidiary arguments. The Court of Appeal had deduced from two subsidiary arguments. The Court of Appeal thought that since the income of a foreign trading company could not be arrived at without deducting from its gross receipts its trading expenses, the same must necessarily apply to a foreign investment company. Not so, Lord Wilberforce retorted.

An interesting tailpiece in the case was that the Court of Appeal had expressed dislike for some well-worn words of a former Master of the Rolls, Lord Greene, in 1942, which the House of Lords made no reference to at all. So Lord Greene's celebrated sentiment, that it scarcely lies in the mouth of those who play with fire to complain of burnt fingers (and that he found it not at all shocking that the legislature had determined to put an end to the war against tax-avoiders by imposing

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## to cash Uncle Vanya

sel Elphick's production lesson's monstrous proposal to do his Uncle Vanya just sell the estate over their heads to believe in the circular rouses him to take his ill-named of the Royal Exchange, shots at the old man with his hand in pistol. This act goes especially well. But when all is finished, from the acting area, yet Vanya's life is over. He has his production is as many work on the farm restored to better as any I have seen him, but Mr. McKern's grey hair is lowered the production of a pointless speech.

Jack writes the call of The only one to escape the curse of age is Sanya whom he is certainly in Joanna David render rather young and anything but "plain," house. Two figures sit watch, also, everyone else agrees only candle-lit table, and with her that she is. No kind of a sitting-room, and this means but perhaps she and Elizabeth Bron should have had each other's roles. Miss Bron is not plain either, but Sanya as she plays her, has the look of an intellectual matron, her hair haloed with loose ends. Strong Miss Bron might well have helped with the laymazing: petite Miss David seems exhausted even by the account books—a circumstance, of course, that adds pathos to the marvellous resignation of her final speech.

There is little sign of goat or any other trouble in Alfred Burke's presentation of him as a tall, erect dandy with neat grey board and an eyeglass; the stillness is not to help him, but to add gravity to his persona. When Vanya is often him with a gaze, he skips nimbly enough to cover behind a sofa.

Michael Feast as a likeable, gook-like Waffles, Peggy Thorpe Bates as a dignified Maman is a match with which he tells his work for the forests wants, make up the rest of a fine double-bill enthusiasm; in cast. It is characteristic of the production that there is no need to make her take some faking. Mr. Feast plays his Maman, and indeed he later guitar and sings as well as a good young gentleman should, and wears his emotions stades and the pompous that get so roughly treated are real things, donated by the Pushkin Club.

B. A. YOUNG

vay Hall

## Greek hymns

gine Music" was the voices were added—not every programme cover Greek operatic soprano would concert given on Thursdays lead one to suppose the fact, the Choir of the Greek but Greece does produce the of Saint Sophia in pure, vibrant-less timbre essenter. The description for church music, and this "Recital of ecclesiastical choir has some useful if over-was more precise. What say examples. Most of the hymns rd was liturgical music, a re-Greek Orthodox services former who died at a ripe age How strongly it descends in 1938, having swept away older forms of Byzantine ancient bad habits evidently the "probably" according to liturgical equivalent of meaning-gramine note, deriving less decorations in operatic singing from Hebrew and earlying, and insisted on simplicity in liturgies") is for to say. Peatecostal the congregation could join in, were sung by male voices. The result, to an outsider, is "d'chanted by the choir's slightly disconcerting. Byzantine and conductor, fine origins, if they exist, are Trantides, four or five overlaid by three- or four-part providing that continuous one which is sometimes by to non-Orthodox ears, bourdon surely ought to chant free and give it large and mainly Greek, but it seems to do the but to force it towards patterns unsuitable to churches. They did indeed e one culture in terms of but one can't help missing a rhythmic freedom and of good Gregorian chant. It twice the draw, we into the tenor register, feels more curious than

"Hymns from the of the second part were ent matter. Now women's

RONALD CRICHTON



Anthony Crickhow  
Lesley Collier (Bianca) and Wayne Engling (Lucentio) in 'The Taming of the Shrew'

## Covent Garden

### Haydee and Cragun

by CLEMENT CRISP

The idea of a true dance evening. Though *Shrew* is no great and unaffected charm of partnership—permanent, multi-dependant and mutually enhancing, honed and polished over the years—is becoming rare in ballet today. Stars whiz round the world, performing ad hoc duets with other guest and star partners in not to help them, but there is never enough time for the years of rehearsal and the deep understanding that will result in an artistic communion which can illuminate the dramatic and dynamic core of a ballet. The example of Markova and Dolin, of Danilova and Franklin, who worked together for a decade and more and whose joint interpretations were marked by a singleness of purpose and ideals, seems almost lost to the ballet of the 1970s. (The Shibley/Dowell linking was the nearest that the Royal Ballet has come to this happy state in recent years.)

The example of Marcia Haydee and Richard Cragun is thus all the more exciting as a triumphant assertion of the theatrical magic of a permanent partnership. Both magnificent dancers, they appear totally aware of each other at every moment on stage. On the bedrock of almost intuitive partnering they can afford to elaborate their joint interpretation, play jokes, even seem to improvise, as we saw on Saturday night when they assumed the roles made for them in *Taming of the Shrew*. It was a golden extraordinary physical allure.

No less thrilling is Richard Cragun's Petruccio. He possesses

that is always the servant of real artistry. The two big solos—his first drunken variation and the rework display at which Miss Haydee emerged as a to a balcony to dance the wedding reveal him as a master of prodigious capabilities and of a Horowitz and the tone of a Liberine. Opportunities to hear this legendary Cuban-American pianist in England have been rare. Bolet surfaced briefly to give a tantalising performance of a single work at the Festival Hall during an International Piano Library Jamboree two years ago—his only appearance here for many years. We have had otherwise to rely on records, but even these, from the days of RCA, have been difficult to find. So it was especially exhilarating on Thursday to confirm what one had always half suspected, but never had the chance to prove at first hand: that there is indeed not an ounce of exaggeration to Schonberg's praise.

Bolet is an enormous pianist:

enormous in physical stature, in

musical weight, in technical

command. But neither is he any

kind of sledgemaster artist: the

subtle shades which Haydn could

only (and might, at some en-

ormous moment) have

have dreamed of and a massive

account of Reger's Telemann Variations op. 134, given with

prodigious dexterity in the

grandest orchestral colours (a

fortissimo pedalled débâcle in-

stantly recalling Horowitz).

Bolet ended with Liszt's

*Réminiscences de Don Juan*, lit-

like a storm with chromatic

blitz-octaves, caressed by gentle

breezes, and by spoken inner

voices, thrown off with com-

plete energy and ease. Ended

calmly to a recital with the

Nocturne of Chopin, a glorious

Moszkowski Juggler, Godowsky's

mesmerising upside-down ver-

sion of Chopin's Black Key

Study, Liszt's *Valzer-Imromptu*,

and supremely sensuous, ele-

gant, a last old favourite,

Godowsky's arrangement of The

Swan. The small but devoted

audience gave Bolet a standing

ovation. Next time, which must

be soon, there will be more of

us to cheer.

## Covent Garden

### Katya Kabanova

by MAX LOPPERT

Janácek's masterpiece is cur-

rently revived at the Coliseum, to have one fine Katya is uncommon; to have two is

Ara June is the new heroine, wonderful.

The staging by John Blatchley, with the sets of Stefano Lazaridis and the exquisite light-

ing and projections of David Hersey, is one of the glories of contemporary operatic produc-

tion, and is in good condition, apart from the handful of stage-

management mishaps that habitually mar ENO first nights.

Charles Mackerras is back in the pit, urging the orchestra to new

masteries in the fiery, thrilling

spontaneities, the vibrant timbres and colours is added a new lyrical

sweetness in the love music.

The cast plays as if Janácek were in his blood. On Thursday

not much seemed wrong in the

opera, except for thin patches in the audience. Mystery-

ing phenomenon, that an opera

such life-enhancing honesty

directions, and depth of feeling

should each time need fresh en-

ergy, warmth, in tones radiant ful performance.

## Elizabeth Hall

### Jorge Bolet

by DOMINIC GILL

In an unusually discerning weight is kept in reserve, power

fully contained. He is a pianist

of the old, grand school (and

especially of the Cuban School,

during the great Horowitz era).

Could any other living musician

except perhaps Horowitz, and

more idiosyncratically, Cher-

Kasky, have transported us with

such vivid, explosive force as

the early years of the century—to

the piano rolls of Lhevinne and

Godowsky, the acoustic records

of Rachmaninov?

It was a recital of the sub-

limest nostalgia, and the keenest

living presence, which gathered

momentum as went. The point

of highest excitement was Bolet's

second ball, devoted to Liszt: the

three movements of the concert

that Liszt had always half

suspected, but never had the

chance to prove at first hand:

that there is indeed not an ounce

of exaggeration to Schonberg's

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blitz-octaves, caressed by gentle

breezes, and by spoken inner

voices, thrown off with com-

plete energy and ease. Ended

calmly to a recital with the

Nocturne of Chopin, a glorious

Moszkowski Juggler, Godowsky's

mesmerising upside-down ver-

sion of Chopin's Black Key

Study, Liszt's *Valzer-Imromptu*,

and supremely sensuous, ele-

gant, a last old favourite,

Godowsky's arrangement of The

Swan. The small but devoted

audience gave Bolet a standing

ovation. Next time, which must

be soon, there will be more of

us to cheer.

Of course, by this time the

orchestra had been playing for

not hurried. He could do little,

however, to make the LPO

one might have expected some

stringed parting, or with the

sorrow of parting, or with the

tearful, though it had

never been shown, quite the confidence

or accomplishment needed for a

work which must be considered

## OVERSEAS NEWS

## Turkey cool to Clifford mission

By Metin Mumcu

ANKARA, Feb. 20.

U.S. PRESIDENT Jimmy Carter's personal emissary in the eastern Mediterranean, Mr. Clark Clifford, arrived here this evening for two days of talks with Turkish leaders on the Cyprus question, Turkish-U.S. defence relations and Turkey-Greek problems.

He arrived from Athens where he conferred with Greek leaders and flies to Nicosia on Wednesday where he will complete the first round of his mission after talks with the leaders of the Turkish and Greek Cypriot Communities.

At the airport, where he was met by Turkish Foreign Minister Ismail Sabri Cagayıgil, Mr. Clifford said he hoped his visit would "deepen and broaden the make even more significant the love and happy relationship between our two countries."

He would confer with Turkish leaders in detail "particularly with reference to defence agreements that are so important to the continued relationship between our two countries."

Turkish-U.S. relations have been sour since the Cyprus war of 1974. Washington imposed a ban on arms supplies to Turkey and was deprived of its use of its bases on Turkish soil as a consequence. A new defence co-operation agreement was signed between the two allies but is awaiting Congressional ratification which will certainly be influenced by Mr. Clifford's report on the situation.

Mr. Cagayıgil, clearly referring to Cyprus, said he hoped Mr. Clifford's visit would "facilitate the solution of problems which surround Turkey."

He further hoped that the visit would terminate, what he bluntly called, the currently far from satisfactory relations between Turkey and the U.S.—a statement which wiped the smile from Mr. Clifford's face.

The Turkish Press has been uniformly cool or hostile in its treatment of the Clifford Mission, considering it an unnecessary and even harmful intervention. One editorialist likened the former U.S. Defense Secretary's visit to that of a bull in a china shop.

## Dissidents no stumbling block to talks—Brzezinski

By DAVID BELL

WASHINGTON, Feb. 20.

THE SOVIET UNION is continuing private talks with the administration and realised that Mr. Sekharov might choose to release the letter and had not criticism of President Carter for his open support of Soviet so-

particular nation." The administration had realised that Mr. Sekharov might choose to release the letter and had not criticism of President Carter for his open support of Soviet so-

"The alternative was to make a public response which would have been far more pointed and provocative. Another possibility was not to respond at all which, if you consider the circumstances, was scarcely reasonable," Mr. Brzezinski said.

The whole question had been discussed at great length with Mr. Anatoly Dobrynin, the Soviet Ambassador, along with other issues such as arms control and trade. "On the fundamentals we are making and have been making an effort to get discussions going—move on SALT and an MBFR and to widen the range of discussion. It has not surfaced yet, but we will produce dividends before too long."

Official Washington is deeply divided about the wisdom of Mr. Carter's support for Soviet dissidents. But it is abundantly clear, as it has been for some time, that Mr. Carter rarely does anything by accident and that, in this case, for better or worse, this is a very human rights, not pointed at any deliberate approach to the issue.

## Pravda warns Carter on 'attempts at interfering'

MOSCOW, Feb. 20.

THE Soviet Union to-day mixed in the first place, and the deeds praise for President Carter's of the same new administration words on the needs for arms of the U.S. do not square with the positive development of its U.S. relations.

Pravda cited "attempts at interfering in our internal affairs, in the affairs of some other socialist countries on the plea of 'defence of human rights.' Of course, those attempts were rejected," it said.

The commentary in Pravda's weekly international review came three days after Soviet Ambassador to the U.S. Anatoly F. Dobrynin warned that the administration's support of human rights activists in the Soviet Union was "not consistent with the positive development of relations."

"But words are not enough," Pravda said. "Statesmen are not judged by words but by deeds."

Editorial Comment, Page 10

## Rhodesians admit Botswana raid

BY OUR OWN CORRESPONDENT

IN A communiqué announcing the death of a white police inspector and the wounding of a police mobile unit were not present. The next day (Saturday) the Rhodesians attempted to recover Detective Inspector Harlow's body, but it had been removed.

By the Rhodesian's own version of the incident, the term "not pursued" seems an inaccurate description.

The engagement was clearly not the consequence of a specific incident which began on Rhodesian soil and which con-

tinued into Rhodesia, while Botswana has counter-charged that Rhodesian forces have regularly infringed their territory.

An increasing number of young blacks are crossing into Botswana, either voluntarily or, according to the Rhodesian government, abducted by guerrillas. From the same area. Previously they had arrived by helicopter and had interrogated local people.

The UN mission led by Mr. Abdurrahim Farah, Assistant Secretary General from Somalia, was actually in the border area when the incident took place on Friday night.

According to a statement issued by the office of the president in Gaborone, the Rhodesian was shot dead by a patrol of the para-military police mobile unit at a village some 13 kilometers inside the Botswana border north of Francistown.

The incident is the third within a week at the Rhodesia-Botswana border, after a period of relative peace which followed a UN resolution condemning Rhodesian aggression against Botswana.

Unconfirmed estimates put the number of refugees passing through Botswana at over a hundred a week, and chartered flights are organised to take them to nationalist camps in Zambia. So far no journalists have been allowed to visit the refugee camp.

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## WORLD TRADE NEWS

**U.S. Treasury may appeal in TV case**

DAVID BELL WASHINGTON, Feb. 20.

U.S. TREASURY will appeal if a New York court, which is considering it in a case concerning imports of television sets, rules against it in a controver-

sy. Fred Bergsten, Assistant Secretary Designate of International Affairs, made an important test case with far-reaching implications.

In January last year the U.S. Treasury ruled that the refunding of "indirect" taxes—as distinct from direct income or profit taxes—does not infringe any laws in the U.S. Zenith

argued that in fact the Japanese

action broke an 1887 counter-

vailing duty law which was

later incorporated into a 1930 Statute.

Mr. Bergsten said that he was well aware that the case could have a serious effect on U.S. trade relations with a number of countries; and the Treasury is most worried by the fact that, if the court finds in Zenith's favour, the ruling may lead to so many doubts in the minds of importers about what duty they will have to pay that they will decide to stop importing television until the air has cleared.

**arter surpluses moves**

OUR OWN CORRESPONDENT WASHINGTON, Feb. 20.

ARTER Administration is issuing other industrialised countries with large current surpluses to move more into equilibrium," a senior U.S. official said over the phone.

red Bergsten, the Assistant Secretary Designate of International Affairs, said that the United States was not seeking to interfere in the internal affairs of other countries, but industrialised nations clearly have a collective responsibility for the management of the economy.

current climate, sizeable account surpluses were "liberating" and it was

**Soviet oil deal with India near**

By K. K. Sharma

AN INDIAN trade delegation has visited Moscow for final negotiations on import of 1m tonnes of Russian crude oil this year in exchange for steel and pig iron, the latter agreement for which was agreed in principle a couple of months ago.

The delay in finalisation of the deal is due to Russia's indecision as to the price it will charge for its crude because of the uncertainty over world prices caused by the ambivalent OPEC decision.

The Russian decision has been taken—though not yet announced—and the Indian team will work out a timetable for both imports of crude and export of steel and pig iron.

Russia has agreed to sell 5.5m tonnes of crude to India over the next four years, beginning with 1m tonnes this year. In addition, substantial exports of kerosene and diesel are to be made.

It has also been announced that India is to help Vietnam in offshore exploration and production of crude.

**Swiss in Turkish dam project**

ZURICH, Feb. 20.

SWITZERLAND'S three leading commercial banks—Swiss Bank Corporation, Swiss Credit Bank and Union Bank of Switzerland—have offered to help finance large-scale Turkish orders with Swiss manufacturers in connection with installations for the second Euphrates dam.

The Swiss Government would extend export risk guarantee facilities for the orders, put at in excess of Sw.Fr.450m. The manufacturers concerned would include the Sulzer Brothers group, its affiliate Escher Wyss and the Brown Boveri concern.

A Turkish decision is expected in a few weeks' time, it was stated in connection with a visit to Bern of the Turkish Foreign Minister.

## DOING BUSINESS IN THE MIDDLE EAST

**The post-Nasser spending spree continues**

BY MICHAEL TINGAY IN CAIRO

PICKING UP the English Ian-fabricated factories has a captive market. But the obstacles are serious.

A locally appointed agent—and local expertise is already overstretched with impossible-to-fulfil commitments—should dominate the news, succeeded in pushing aside the usual bar-

rage of items on investment approvals, expected loans, new funds and expected improvements in the budget deficit.

But figures in Egypt are not of credit enables the local party to come up with the hard currency to fulfil his contract. Individuals can import a certain amount with currency held in the offices of Ministers and bureaucrats to be redigested by a totally uncritical local Press and published to reassure one that today's gloom will be transformed into a rose

But with Egypt's Central Bank juggling with pitifully limited amounts of hard currency it is not surprising that guarantees of hard currency are made sparingly. A year long dispute with the international airlines with over \$20m. in Egyptian pounds which Egypt refused to buy back was settled recently—but only after a compromise on the rate of exchange.

The newcomer can try to find other financial guarantees—it would be foolhardy to accept the buyer's belief that he can get the foreign exchange but he can also use the supplier credit system. Companies specialising in buyer and supplier credits like Tenants Guarantees are fluent in the pitfalls of Egyptian foreign exchange dealings. A Tenant man pointed out "it is more expensive but the company does get the deal through quickly and the seller does get his money."

Foreign exchange is the bane of difficulties in Egypt. There is not enough of it and the price varies with the transaction. Recent moves at the insistence of the International Monetary Fund to simplify the exchange rate system to a dual rate are in limbo as is the total introduction of amendments to Law

Egypt plans to import more goods next year and may continue as a net importer of services. Someone selling anything from children's tricycles to pre-

subject to administrative moves and some investors will messenger for in-town communications, a customs fixer for the airport, discreet cousins for bribes, and preferably a wife to fight the voracious flat and estate agents. To survive in Egypt one must become a connoisseur of inefficiency.

It is probably a myth that the murky bureaucracy is soothed with Nasserites working secretly against Mr. Sadat's *lifistah* policy. There is nothing more sinister than a malaise which comes from the view that it is naive to swim against the tide of inefficiency and corruption. The employee rights says "they pretend to pay us so we pretend to work."

The visitor with grand ideas of fixing everything by bribes will probably be disappointed. Accepting bribes is like taking an Egyptian mistress—everybody does it but they must be seen to be pretending not to. Bribes work best through a middle man but beware of paying for services that cannot be rendered.

There is nothing unchanging about the confusion in Egypt's oddest area of business, the Free Zones. Set up with little forethought supposedly to free the foreign investor from the tangles of red tape, the Free Zones should theoretically raise standard of production, attract technology and bring dollars into Egypt.

But their function is so foggy that one of the two Free Zone banks, the Bank of Niva, has been shelved. Many businesses have welcomed the Free Zones. Set up with little forethought supposedly to free the foreign investor from the tangles of red tape, the Free Zones should theoretically raise standard of production, attract technology and bring dollars into Egypt.

The survivor in Egypt is the Scotia, suspended operations for one who doesn't try to get his one month last summer and own hotel room, does not try to reopen as a foreign exchange

Following a number of complaints, the Cabinet is about to introduce amendments to Law for each job—a driver to sur-Zone business was too haphazard to justify banking on it. mount daily traffic hazards, a

**World Economic Indicators****RETAIL PRICE INDICES**

many	Jan. 77	Dec. 76	Nov. 76	Jan. 76	Change on	
					earlier	base
	142.0	140.7	140.0	136.7	3.9	1970=100
	175.3	175.8	175.8	163.2	7.4	1969=100
	175.3	174.3	173.8	166.7	5.2	1967=100
	172.4	168.0	165.8	147.9	16.6	1974=100
	173.8	173.2	171.8	158.2	9.8	1970=100
	161.3	160.5	159.9	150.0	7.5	1971=100
	112.6	112.4	112.4	102.9	10.3	1975=100
	218.8	216.1	211.6	179.2	22.0	1970=100

**Austrian deficit up**

By Paul Lendvai

VIENNA, Feb. 20.

AUSTRIA'S visible trade deficit last year jumped by 75 per cent. to an all-time peak of Sch.53.2bn. (\$1.85bn.) and gold and foreign exchange reserves dropped by Sch.31.9bn. compared to 1975.

Analysing these figures and the gloomy prospects for the current year, Dr. Philip Rieger, the central bank director in charge of foreign exchange, called for measures to stem the further rise in imports.

**Finance for Yugoslavia**

By Our Own Correspondent

BELGRADE, Feb. 20.

AN AGREEMENT has been signed here between a consortium of nine banks from

Northern America, Europe and Iran led by the Bank of Montreal of London, and the Yugoslav Investment Bank of Belgrade on \$23.2m financial credit

**Contracts**

• P &amp; O is to join American and Saudi Arabian interests in the transformation of a new inland trans-

port company, the National Transport Company of Saudi Arabia to provide road trans-

port services through the Arabian peninsula. P & O will be operated by the jointly owned subsidiary Schelde Chemie of

Antwerp, the plant will call for a 30 per cent. stake in the Jeddah-based business, which will specialise in container, trailer and heavy haulage work.

• A chemical plant producing raw materials for the dyestuff industry is to be built at Bruns-

bueettel, North Germany, as a joint venture of the Swiss chemi-

cal concern Ciba-Geigy and the German company Bayer. The

Antwerp, the plant will call for investments of some Dm500m. and give work to 450.

• Thorn Domestic Appliances

has recently secured a £2m. \$800m. petrochemical complex at order for the Kenwood Chef for Jubail, Saudi Arabia.

Sweden and another £3m order for refrigerators for Portugal. that their subsidiary company

Mitsui said it arranged a Khansheb Sykes in the United

new direct deal to import 20,000 barrels daily of crude oil from the United Arab Emirates over a 41 years from next July. Initial will act as sub-contractors to the

import price of AE oil will be \$12.50 a barrel, but it will be

Orient Contracting Company, linked to new OPEC price and the work comprises dewatering 35 kms of pipeline and three

revisions.

• Dow Chemical Europe has pumping stations to serve a new

sewage treatment works to be reached an interim agreement under which it is in continue

constructed outside Abu Dhabi

studies for the construction of a

**Scotboard—10 years old—but big for its age**

And a pretty precocious ten-year old, at that.

After all, from the time we opened our first production line in 1967—a caulkless system that's since become standard for the industry—we've been setting the pace for innovation in chipboard manufacture.

In the early 70's, we introduced integral tongued and grooved flooring board to the market. And, in 1974, we became the first manufacturer in the U.K. to produce a chipboard that met the stringent tests for the British Standard Flooring Grade.

With Scotseal, we have become the only producer in Europe of this treated board, capable of lying about in any weather without falling apart.

And, most recently, we've opened a new production line for special fibre surfaced board tailored for the furniture industry.

All along the way, these ten years, we've been developing new ways to improve the product and conserve raw materials for future generations. We believe that's both good sense—and good business.

So, if as Wordsworth said, the child is father to the man, we feel downright optimistic as we start our second decade.



**Scotboard**  
Innovators in Chipboard

Irvine Industrial Estate,  
Irvine, Ayrshire KA12 8NA  
SALES OFFICE: Direct Lines  
Tel: Irvine (0294) 72321-4

A member of the BPB Industries Group





## HOME NEWS

# Unemployment could reach 1.75m. by year-end

BY PETER RIDDELL, ECONOMICS CORRESPONDENT

THE GLOOMY outlook for unemployment is likely to be underlined again to-morrow with the publication of the jobless figures for mid-February.

Mr. Albert Booth, the Employment Secretary, has already said that there might be a seasonal rise in the forthcoming figures.

He has pointed out that there is a rising trend in some areas which is "very worrying. Whether things will get worse in the broad sense remains to be seen."

This comes at a delicate stage of the talks on pay policy after July, and TUC leaders have made it clear that they want specific undertakings on a reduction in the jobless total.

Over the last few months, unemployment has been rising at a monthly rate of between 12,000 and 15,000, seasonally adjusted. The U.K. adult total stood in mid-January at 1.34m. — equivalent to an earlier sharp fall, and there will

be close interest to see whether this improvement has continued.

The Government has said that unemployment is likely to increase throughout the year, reflecting not only the low rate of economic growth, but also demographic changes.

There is no official forecast of what the unemployment is likely to be, but a number of non-Government projections have indicated that it will be between 1.5m. and 1.75m. by the end of the year with a gradual fall thereafter.

Further evidence of the state of the economy — coming at a crucial stage of the preparations for the Budget on March 29 — will come on Thursday in the form of the capital investment and stock figures for the fourth quarter.

There were signs in the third quarter that investment was beginning to recover after its decline in the first half of the year with a gradual fall thereafter.

Recent industrial production figures have suggested that the rundown in the level of physical stocks may have come to an end during the fourth quarter, although a few forecasters expect a large amount of restocking in the immediate future.

A detailed overall view of the economy will also come this week, on Friday morning, from the National Institute of Economic and Social Research in its quarterly review. The last issue at the end of November included optimistic forecasts both about the balance of payments and the public sector borrowing requirement.

Government experts are not yet ready to accept that any errors have been predominantly in one direction; but they readily concede that it becomes more difficult to record trade flows accurately during periods of rapidly changing currency values.

The under-recording of exports — announced in June 1969 — was an important factor in the There is some sample evidence

of 5.7 per cent of the work-force.

The Treasury has forecast a rise of 1.5 per cent in manufacturing investment in real terms between the second half of 1976 and the same period of this year, while the CBI has also taken an optimistic view.

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# New bid to speed Marathon order

BY OUR OWN CORRESPONDENT

FEARS THAT the entire work-force at Marathon's Clydebank jack-up rig could be laid up to 300 feet deep and costing of while the Government and the British National Oil Corporation decide which type of rig to order £20m. and taking up to 18 months to complete.

The Corporation has indicated that class 385 stands a better chance of being a buyer than Marathon's cheaper designs.

If the Government opts for the class 385 it could be two months or more before steel cutting starts at Clydebank and the first of the workers required are recalled from suspension.

• There was new hope yesterday for the oil rig construction yard at Methil in Fife where the first redundancies of a phased pay-off programme took place on Friday.

Mr. Harry Gourlay, MP for Kirkcaldy, said that he had received an assurance from Sir Charles Villiers, chairman of the British Steel Corporation, and other chief executives that they were determined to secure the future of the yard.

Mr. Gourlay added that he welcomed the news of an order by Shell for additional work on the rest of the yard.

Mr. Ian Clark, the Corporation's executive director, has given a postponement of options ranging from redundancies for a further month.

THE SUPERANNUATION funds payments start before the office of the Inland Revenue is normal age is reached. The Government is now proposing to approve company pension schemes which clear that it cannot lower the pay pensions for a limited period only. This would enable to do so. Employees who want companies to meet the growing to retire early thus have to look pressure for early retirement by to their employers to bridge the making some pension provision gap.

But up to now, employers scheme while obtaining the full could get Inland Revenue approval to pay pensions before 65 only if they set up a full company pension scheme.

The new State pension scheme, scheduled to start in April 1978, will ultimately provide a decent level of pension especially for the lower-paid. Consequently many employers consider that their employees will have adequate pension provision and a company scheme providing full pensions is not necessary.

This view is feasible if employees retire at the normal age — 65 for men, 60 for women. But if retirement is early there are problems, since under no circumstances do State pension

payments start before the normal age is reached. The Government has made it clear that it cannot lower the pay pensions for a limited period only. This would enable to do so. Employees who want companies to meet the growing to retire early thus have to look pressure for early retirement by to their employers to bridge the making some pension provision gap.

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This latest move has not resulted from the miners' early retirement settlement, said the Superannuation Funds Office, which was proposing to approve such schemes only if the pension paid was about the same level as the ultimate State pension.

It would not approve a scheme which, for example, provided a pension of £4,000 a year from age 60 to 65 if the State pension from age 65 was only £1,500.

The miners' settlement proposes to provide comparatively high levels of temporary pension until 65.

Mr. Harry Lucas, head of the pensions division of the General and Municipal Workers' Union welcomed the move as providing a positive step to enable employers to meet demands for early retirement by providing fully funded pensions that "bridge the gap" between retirement and State pension age.

## National Savings tops £228m.

By James McDonald

NATIONAL SAVINGS figures last month were the highest ever recorded with a net inflow of £194.8m. for five weeks to January 29. After adding accrued interest there was an increase of £228.3m. in the total sum invested in National Savings the Committee said yesterday.

"National Savings Certificates, with a net increase of £182.5m. are the major contributors towards this increase," said Sir John Anstey, president and chairman of the Committee.

It is evident that in a period of falling interest rates, the 16th Issue Certificate is becoming even more attractive with its return equivalent to 28.78 per cent. But if the investment account is only on sale until March 31, 1977.

The National Savings Bank Ordinary Accounts traditionally register an increase after Christmas and on this occasion showed a net increase of £9.6m. But the Investment Accounts, said Sir John, "are a little disappointing with a net outflow of £400,000."

"There is little evidence yet of the effect of the new rates of interest of 5 per cent in the Ordinary Account and 10 per cent in the Investment Account."

Sales of British Savings Bonds continued to remain at a low level with withdrawals exceeding receipts by £6.5m.

"The Trustee Savings Banks have registered a modest increase in funds of £5m. to January, while the turnover of £94.1m. shows evidence of extensive use of their banking facilities by their customers," said Sir John.

The total amount invested in National Savings at the end of last month was £124.7m. compared with £113.7m. a year earlier.

# Rates rise to pay Clay Cross debt

# Lynch to seek U.N. role in Ulster

BY GILES MERRITT

DUBLIN, Feb. 20

MR. JACK LYNCH, Ireland's Opposition leader, has suggested a United Nations intervention in Northern Ireland in a speech clearly intended to outline his party's political platform in the forthcoming General Election.

The Fianna Fail leader told his party's annual conference in Dublin over the weekend that if he regained power he would seek talks with the British Government.

Mr. Lynch made a series of electoral pledges, ranging from promises to end all gerrymandering of constituencies to nationalisation of mineral rights. But it is thought that his chief on the Ulster question.

Mr. Lynch's success at the

Flannan Fail's success at the

On the question of UN intervention, possibly backed by international mediation, he said: "When the present Northern Troubles started almost 10 years ago, we as a Government sought United Nations intervention without success."

"I now pose the question: seven years of continual hostilities, violence and destruction of life and property — time again to consider intervention?"

Air shuttle services may be extended

BY OUR BELFAST CORRESPONDENT

LOYALIST PARAMILITARY groups in Ulster have proposed peace talks with the Provisional IRA. They say the talks could lead to an end to violence and the withdrawal of British troops to barracks.

The initiative came yesterday from the Ulster Loyalist Central Co-ordinating Committee, which opposed the setting up of Protestant para-military groups, including the illegal Ulster Volunteer Force.

It is calling a meeting of elected representatives to elect a council of its own which could solve Ulster's problems.

The Provisionals in Belfast, economic and political

who last week finally negotiated through speculation that a cease-fire was

ience.

THE GOVERNMENT has been accused of being the "highest price government of all time." Mrs. Sally Oppenheim, Conservative MP, said in a weekend speech that Labour's mismanagement of the economy was entirely to blame for the rate of inflation.

"This Government will always be remembered as the highest price government of all time," she said.

"The rise in prices over the past three years cannot be blamed on large scale profiteering — the prices are firmly controlled by the Price Code. Nor are rising commodity prices entirely to blame — this is hitting us much harder than most other countries because the pound has been devalued by about one-third since the Government took over."

"There are no short cut painless solutions — only pursuit of sensible economic policies can restore confidence to this country to enable us to repay our debts and can sustain price stability."

Price of strike newspaper up

THE PRICE of the Northern Ireland Evening Telegraph at Kettering, goes up to 4p after selling at 2p since its strike began.

Lists went on strike 11 weeks ago.

## HOME NEWS

# Unemployment could reach 1.75m. by year-end

BY PETER RIDDELL, ECONOMICS CORRESPONDENT

THE GLOOMY outlook for unemployment is likely to be underlined again to-morrow with the publication of the jobless figures for mid-February.

Mr. Albert Booth, the Employment Secretary, has already said that there might be a seasonal rise in the forthcoming figures.

He has pointed out that there is a rising trend in some areas which is "very worrying. Whether things will get worse in the broad sense remains to be seen."

This comes at a delicate stage of the talks on pay policy after July, and TUC leaders have made it clear that they want specific undertakings on a reduction in the jobless total.

Over the last few months, unemployment has been rising at a monthly rate of between 12,000 and 15,000, seasonally adjusted. The U.K. adult total stood in mid-January at 1.34m. — equivalent to an earlier sharp fall, and there will

be close interest to see whether this improvement has continued.

The Government has said that unemployment is likely to increase throughout the year, reflecting not only the low rate of economic growth, but also demographic changes.

There is no official forecast of what the unemployment is likely to be, but a number of non-Government projections have indicated that it will be between 1.5m. and 1.75m. by the end of the year with a gradual fall thereafter.

Recent industrial production figures have suggested that the rundown in the level of physical stocks may have come to an end during the fourth quarter, although a few forecasters expect a large amount of restocking in the immediate future.

A detailed overall view of the economy will also come this week, on Friday morning, from the National Institute of Economic and Social Research in its quarterly review. The last issue at the end of November included optimistic forecasts both about the balance of payments and the public sector borrowing requirement.

Government experts are not yet ready to accept that any errors have been predominantly in one direction; but they readily concede that it becomes more difficult to record trade flows accurately during periods of rapidly changing currency values.

The under-recording of exports — announced in June 1969 — was an important factor in the There is some sample evidence

of 5.7 per cent of the work-force.

The Treasury has forecast a rise of 1.5 per cent in manufacturing investment in real terms between the second half of 1976 and the same period of this year, while the CBI has also taken an optimistic view.

If the Government opts for the class 385 it could be two months or more before steel cutting starts at Clydebank and the first of the workers required are recalled from suspension.

• There was new hope yesterday for the oil rig construction yard at Methil in Fife where the first redundancies of a phased pay-off programme took place on Friday.

Mr. Harry Gourlay, MP for Kirkcaldy, said that he had received an assurance from Sir Charles Villiers, chairman of the British Steel Corporation, and other chief executives that they were determined to secure the future of the yard.

Mr. Gourlay added that he welcomed the news of an order by Shell for additional work on the rest of the yard.

Mr. Ian Clark, the Corporation's executive director, has given a postponement of options ranging from redundancies for a further month.

THE SUPERANNUATION funds payments start before the office of the Inland Revenue is normal age is reached. The Government is now proposing to approve company pension schemes which clear that it cannot lower the pay pensions for a limited period only. This would enable to do so. Employees who want companies to meet the growing to retire early thus have to look pressure for early retirement by to their employers to bridge the making some pension provision gap.

But up to now, employers scheme while obtaining the full could get Inland Revenue approval to pay pensions before 65 only if they set up a full company pension scheme.

The new State pension scheme, scheduled to start in April 1978, will ultimately provide a decent level of pension especially for the lower-paid. Consequently many employers consider that their employees will have adequate pension provision and a company scheme providing full pensions is not necessary.

This latest move has not resulted from the miners' early retirement settlement, said the Superannuation Funds Office, which was proposing to approve such schemes only if the pension paid was about the same level as the ultimate State pension.

It would not approve a scheme which, for example, provided a pension of £4,000 a year from age 60 to 65 if the State pension from age 65 was only £1,500.

The miners' settlement proposes to provide comparatively high levels of temporary pension until 65.

Mr. Harry Lucas, head of the pensions division of the General and Municipal Workers' Union welcomed the move as providing a positive step to enable employers to meet demands for early retirement by providing fully funded pensions that "bridge the gap" between retirement and State pension age.

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# The Executive's and Office World

EDITED BY JOHN ELLIOTT

Vending machines for food and drink are now more sophisticated but important factors affect the economics of this type of service. Nicholas Leslie reports

## The mechanics of catering

IT LAMB and vegetable to embark on any capital or a beef curry served investment in vending, particularly a plastic plate from a tin early in the present economic climate. A vending machine may be every employee's idea of a mid-day meal. But of the major automatic catering organisations to be believed, this eating is about to grow along with other systems of automatic food dispensing. The criteria for installing the first two are similar, since they tend to go

transfer into refrigerated vending machines. From there, they can be removed by an employee and heated rapidly in an adjacent microwave oven.

An obvious advantage of these is that the number of kitchen staff can be reduced substantially, since food can be prepared throughout a full working day instead of having to be compressed into a short production time. In addition, largely on a company's total

such as GKN Sankey—the a. very different picture in U.K. where, at the end of the 1960s, only 20 per cent of vending machines supply this type of installations was handled on

machines, which keeps meals in that basis.

Now, while such operators

have been joined in competition

by the industrial caterers setting up vending divisions, there

is still a substantial percentage

of vending carried out by

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MONDAY, FEBRUARY 21, 1977

## The re-entry problem

THE CHANCELLOR, Mr. Len Murray of the TUC and Mr. John Methven of the CBI displayed an unusual unanimity on Friday when they spoke of the necessity to find some effective successor to the present restraints on wage increases. They spoke against a background of growing disillusion and growing strain, after the announcement of the largest monthly increase in the cost of living for nearly two years, and the threat that grievances over restraints may paralyse the whole British Leyland group.

Faced with such problems, it is easy to wonder whether the effort to achieve a further stage of restraint in wage making. The results to date do not appear impressive, and the cost has been high. Legislation such as the Employment Protection Act, has made unemployment worse: pay rigidities cause inefficiency as well as resentment; and perhaps most insidious, a TUC influence over policy which has produced little to satisfy union members, but has sapped confidence both in the economy and in the powers of decision of our elected Government. It is clear that a radically different approach is now required, both in the pay formula and the kind of bargaining which produces it.

### Orderly bargaining

The leadership of the trade unions appears in some ways to be recognising this more readily than the Government. When Mr. Murray gave his warning that a further wage explosion would gravely hurt ordinary families, through still faster increases in prices and unemployment, he not only stated the case for persisting with rational restraint; he implicitly put the argument against a political bargain. If the leadership now recognises that orderly bargaining is in the interest of union members, as it is most emphatically, then that should be an end to the costs express our long-deferred matter: employment and living adjustment to reality, both in standards will be higher if costs can be kept in check, and in domestic fiscal balance: the unions need not be bribed to the outlook on both fronts is follow their own interests. Their refusal to discuss restraint is possible both to reduce inflation ahead of the Budget is also helpful. Mr. Healey's freedom to some of the stresses set up in cut taxes is constrained by his last two years.

## Mr. Carter and the dissidents

"BECAUSE WE are free," the President Carter said in his inaugural address. "we can never be indifferent to the fate of freedom elsewhere." He has said the same thing again in his letter to the Soviet dissident, Professor Andrei Sakharov. What is new about this is not the sentiment—it would be very dim and indeed unnatural for an American President to say anything different—it is the fact that President Carter is putting it into practice. The letter to Professor Sakharov was in direct response to an appeal from the latter for the President "to raise his voice" on behalf of those intellectual dissidents who are persecuted in the Soviet Union and Eastern Europe. That is exactly what President Carter has now done and it is exactly what Vice-President Mondale will be doing when he receives the exiled dissident, Mr. Vladimir Bukovsky, this week.

### Two questions

All this is in marked contrast to the time when Dr. Kissinger as Secretary of State advised the then President, Mr. Ford, not to see Aleksandr Solzhenitsyn on the grounds that such meeting might offend the Soviet authorities. Clearly the change is deliberate policy and, as such, it raises two major questions. The first is whether it will prejudice other U.S. policy objectives such as the attempt to reach a second strategic arms limitation agreement. The second is whether such a policy will actually help the dissidents.

Neither question is particularly easy to answer and indeed both may be at this stage unanswerable. On the issue of the Soviet-U.S. relations in other areas of things, it is one can argue that both sides have an interest in, for example, a SALT accord, and that the Soviet interest will remain unchanged by whatever the U.S. Administration has to say about human rights. It may be different in the Soviet signature on the Helsinki agreement to support him.

# A grievous loss for Labour

THE death of Anthony Crosland has rightly been seen as both a personal tragedy and a major public calamity. It is poignant to see a man of great vitality and courage being robbed, after many setbacks and disappointments, of the crown of his career and of the prize he had always wanted most—the Exchequer—just when it was finally within his grasp.

The loss to British politics is equally distressing, but it is much harder to evaluate properly, for Crosland did not fit easily into the normal stereotypes of political achievement. He was certainly a better than average departmental Minister, but he was not really a great one. His intellectual fastidiousness made him slow to make up his mind. His best was the enemy of his good.

At the Foreign Office, he was making himself at home by it. It would appear, then, in conventional terms, that Mr. Callaghan's position this week

bound to make hard-pressed officials legitimately impatient, and Treasury equally so.

Again, while he was an immensely attractive figure, he was not a charismatic one, being too self-conscious and too honest to play to the gallery.

He was a marvellously lucid expositor of complicated ideas, and his intellectual authority in the House of Commons was complete. But he was never a great persuasive orator.

He had many political friends and admirers, but acquired few followers—mainly because he never stood for something

simple, and was not prepared to reduce the subtlety of his own position to the Left-Right simplicities that most potential allies required in order to fight the internal battles of the Labour Party during the last 10 years.

At the Foreign Office, he was making himself at home by it. It would appear, then, in conventional terms, that Mr. Callaghan's position this week

leaves three crucial points of account—all of them facets of a single, inescapable truth particularly if, as seems likely, the Prime Minister wishes the next Chancellor to possess the dual distinction and integrity to challenge official Treasury Government. In the first place, views (a qualification certainly the quality of many Government possessed by Crosland). But decisions will be immediately White of intent leaves so little room for manoeuvre that Treasury war—or a machine which runs orthodoxy is likely to be in on the creative tension between ascendant, whoever is chosen.

In party terms, the loss of the Foreign Secretary is not formidable scepticism and, under heavy attack from the far Left when he died, and the Labour Right felt uneasily that

## Social democracy's gifted theorist

MR. ANTHONY CROSLAND, ring to the Parachute Regiment appointed Secretary for Foreign Affairs by Mr. Callaghan last April, was

one of the most lucid and effective of Labour Party intellectuals but he never really fulfilled his great potential.

He had one of the best records of any departmental Minister and a very varied career behind him ranging from Minister of State for Economic Affairs to Secretary for Education and Secretary for the Environment, but because of his lack of a Labour Party base he came a disappointing bottom of the poll for the party leadership last March.

Nevertheless, his influence was considerable, particularly among the younger MPs in the centre and Right of the Parliamentary Labour Party. Since the publication 20 years ago of his book *The Future of Socialism* he was regarded as one of the most significant leaders of the Social Democratic wing of the party.

His death, at the age of 58, was a tangible expression of a strategy giving priority to production. A statement that the Government aims to bring interest rates down as fast as is compatible with inflation prospects would promise a direct contribution both to growth and to lower living costs.

It is, of course, the hope of lower inflation which makes the whole effort worthwhile. The

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## FINANCIAL TIMES SURVEY

Monday February 21 1977

## THE COMPUTER INDUSTRY

There is evidence of new growth in European computer development, and this, coupled with EEC attempts to curb the monopoly of the major U.S. companies is giving the European manufacturers fresh hope. Now it is the European companies which are beginning to show the benefits of state involvement.

HE dismal Johnnies in CDC users were applying their equipment primarily to scientific operations and the remainder principally to business work that Europeans will be able to stand up to competition, there is a nary tale in a study that's to have been over in the year-end rush.

ipro Research Corporation of Delran, New Jersey, led the results of a survey of users of large computer is and allocated ratings weighted basis running (equals excellent) down to (equals poor) for ten of the equipment from operation and reliability of programming and vision and including speed of maintenance.

surprise, surprise... it company better known for is of thousands of minis all over the world. Equipment Corporation, first with a user sati score of 3.7. The now Xerox Data Systems second with 3.4, followed by Amdahl with 3.2. Univac tied for fourth place then came Burroughs and its 3.0, Honeywell 2.9 and 1.8. only score on which IBM the large DEC 10 and DEC minis was in applications names, which is hardly surprising, while in ease of low and ease of programing the giant came 5th and pectively.

ah, now challenging the machines of IBM, fared in seven out of 12 areas it is fair to point out only six Amdahl sites were pressed against 1275 IBM relevant that DEC and

calls. But it has grown unevenly time, of course, the Commission NASA funds taps in 1972, the version work to do, albeit aided 2904, erroneously regarded as despite the efforts of the U.S. has made a number of strictures larger U.S. manufacturers were by a number of significant small business system though and other Governments to on the preferential purchasing enjoying massive home market technical advances, including it can go up to mid-range level, regulate expansion and police policies member states have support, enjoying a massive microprogramming made since and the three machines so far training a new sales force to practise vis-à-vis the computer advantage over the developing then.

It took IBM 60 years to reach \$1bn. profits and only six (1970-1976) to go to \$2bn., this last because of the gross imbalance. This support was necessary in the world. Over half is generated outside the U.S., thus the corporation moon shot cost around \$35bn. a year, half of which went to Electric and the creation of English systems in the £400,000 to £2m. and more class. The ICL is not the only U.K. organisation to tackle the U.S. market. Logica, a leading software house which has made a name for itself in solving difficult communications problems, has set up a U.S. section and expects to do well because Britain has far more experience of very large commercial networks through its banks than America, where only California has allowed the setting up of many bank branches.

It is true that under the French Government deal with Honeywell, medium-scale processors are exported to the U.S. But in the ICL case, whole systems will go out, and the return must be far higher.

Jewitt is not perturbed by the apparent immense disparity in the research expenditure between ICL and IBM, pointing out that the latter does its work in house while ICL is reaping the benefit of the development at ICP, the ICL/NCR/CDC peripherals group, the work done by major integrated circuit manufacturers such as Texas and Motorola to keep abreast of IBM and the fact that the U.K. is still a major software centre. The total R. and D. expenditure ICL has

on vectored government purchases for survival. It is facing to expand from \$1.4bn. in 1975 to the same tough problem of \$2.2bn. in 1980. The job does not stop there, reconciling non-compatible lines of equipment inherited however. ICL is also preparing increasingly militant public sector single tender pur

to be seen. After all the complaints made by U.S. controlled companies in Britain concerning the ironies of this would be a supreme irony.

## Turning the tide

By Ted Schoeters

## Changes

It would be wrong to read too much into the report since it is solely on the U.S. market. However this is a market which has directly suffered all the consequences of the RCA, GE and Xerox withdrawal from computing activities and a bewildering succession of acquisitions and mergers. Its computer users must be among the most cynical and since IBM has enjoyed around a 60 per cent share of the market for as long as the majority of the young data processing staff population can remember, it may well have come to be looked upon as part of the scene, like taxation or the weather, about which people may complain, but cannot influence to any great degree.

This is one of the many anomalies in an industry which has grown so fast since the war that it needs no slide-rule to predict the year in which automation will take over as the leader, ahead of cars and petrochemi-

Justice Department is doggedly ledge. This means that research pursuing the anti-trust suit and development were taking against IBM and is just about 50/60 per cent of expenditure, and since IBM has enjoyed half way through examining the evidence it proposes to putting facilities within the present after 226 days of hear-space programme organisation and the preparation of its supporting contractors 35,000 pages of transcript.

Unless there is a sudden settlement on the lines of the old 1956 consent decree, these figures are likely to double before the IBM defence can be heard, some time early in 1978.

The EEC Commission's look at monopolistic practices may factor of two, and it does not thus be an extremely long one take into account work for million and neither actions are likely to pay off, it is obvious that to have any significant results until President Nixon turned off both the weaponry and faced in 1968, with more co-

existence is not accurately known, but it is believed to be about £900m. in Germany, company which is continuing to be about £300m. in France and £60m. exceed export targets, helped by the low level of sterling.

In Germany, Siemens has put a very large sum into maintaining a presence which does not say Arnold Jewitt, director of

In France, the newly-formed Honeywell Bull amalgam, with 10/220 and the 150 intelligent terminals as well as point of

ing is very heavily dependent on vectored government purchases for survival. It is facing to expand from \$1.4bn. in 1975 to the same tough problem of \$2.2bn. in 1980. The job does not stop there, reconciling non-compatible lines of equipment inherited however. ICL is also preparing increasingly militant public sector single tender pur

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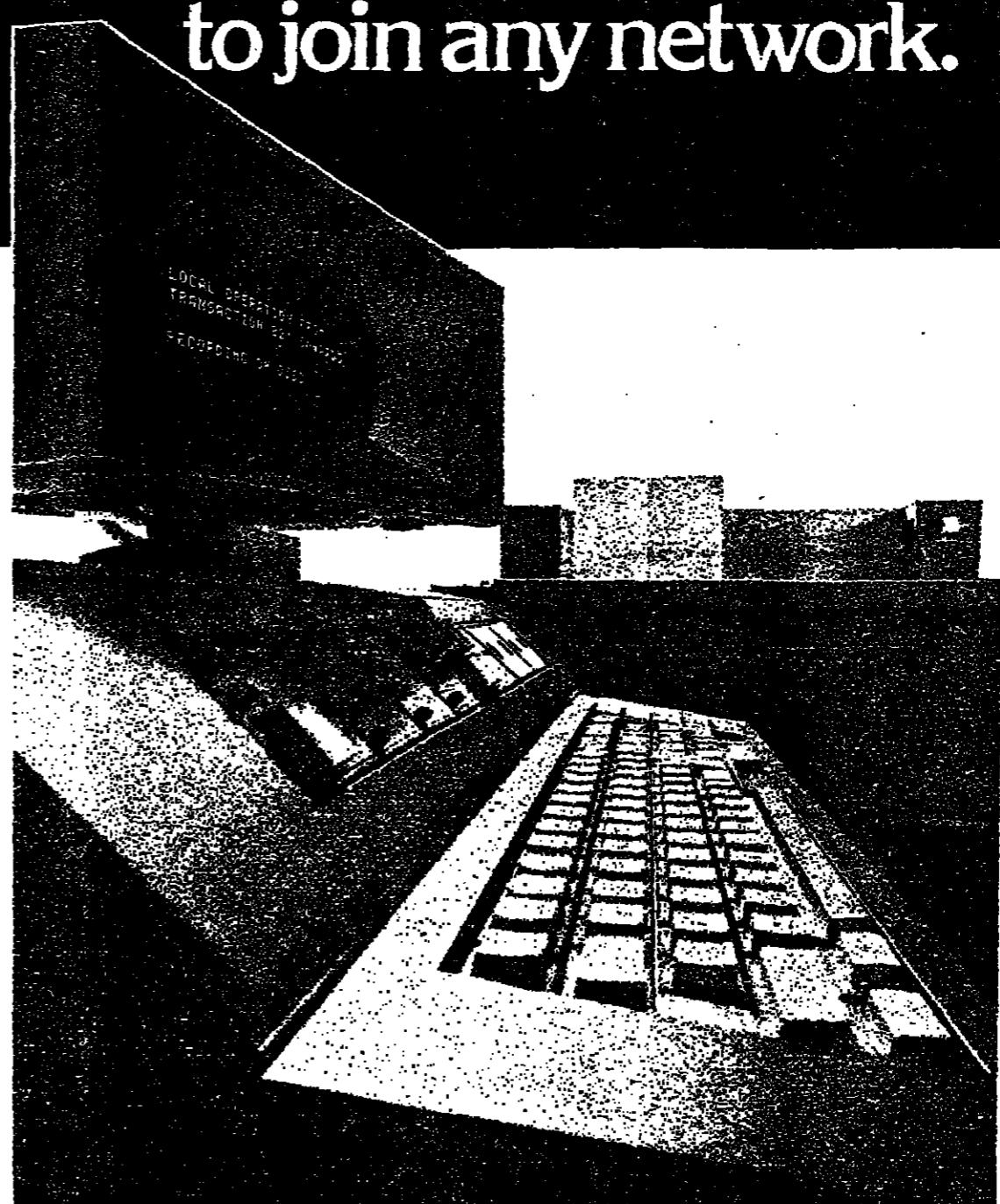
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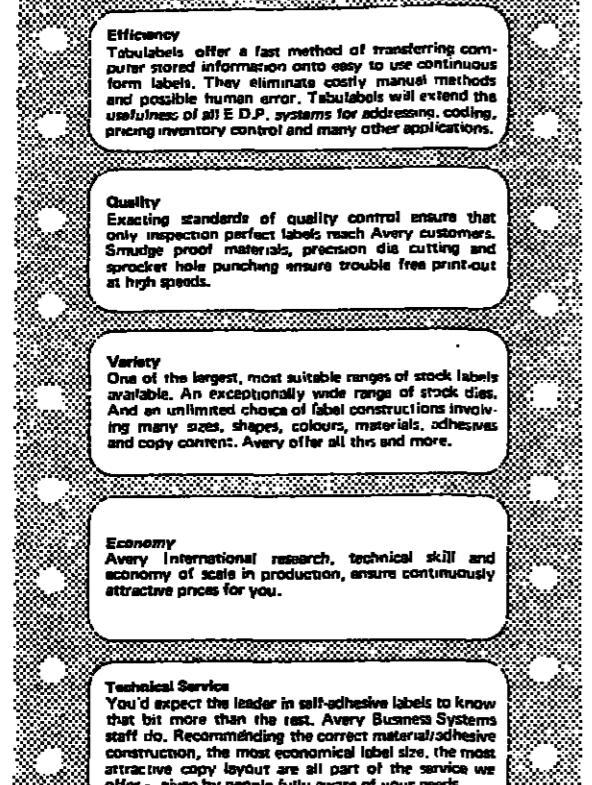


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LATE LAST year, Hewlett and probably the first instance Packard, who are acknowledged in the industry where computer leaders in calculators putters were used to design the mini-computers field, disclosed that a total of \$20m had been spent to perfect a method of making smaller, faster and more reliable components for use in the equipment it will be new in Britain. Ferranti selling from about the end of the year.

Silicon on sapphire (SOS) is the name of the process. It had to use eight-layer platters in its been attempted before in version of the RCA machines Britain and the U.S. but it launched under the title abandoned by early developers System-4. Unfortunately, it took because of the cost and—in one time to get its platter instance—because the product technology right, but this was was unsatisfactory, though only one of the reasons why it was eventually absorbed by ICL

The pay-off for Hewlett Packard comes when it starts to offer higher performance equipment without increasing prices, or substitutes complex, though reliable, SOS products for a host of earlier components in a standard product costing less to manufacture.

IBM has also disclosed that after something like ten years of development it has succeeded in building ultra-fast Josephson switches and had developed the technology to manufacture them on an industrial scale. If required, Josephson is an extremely difficult technique if only because the "switch" is just a few atoms thick and what IBM spent in development is a matter for pure conjecture. It cannot be far off the figure for SOS and is probably more but as Dr. R. E. Gomory, IBM vice-president and director of research said—and he yields a shrewd "year budget"—"If we don't do it, who can?" IBM now has a switching device so fast that contemporary instruments cannot measure it.

When, some three years ago, ICL unveiled the first two big machines in its New Range, a major talking point was the high packing density achieved with their predecessors in the process because of the way in which the components largely IBM, could not afford to be interlinked by using it, he asserted, pointing to the circuit boards with as many as company's financing problems 16 layers of connection planes with the 360 as justification.

This also tidied up the plane. If Mr. Barron had said users to planes wiring (back wiring) could not afford a fourth very considerably, at a time generation, his audience might when all competitors' machines not have been so surprised since still looked like mad spaghetti IBM user investment in software once the cabinets were opened, ware has been estimated at £100m. He did not rule out this was, however, no cost much as £800m. He did not rule

metic move by ICL. Far from it, our new ranges of machines but

The design of the new range was stressed that they would be a highly automated operation little more than improvements

on their predecessors, taking in bits and pieces of new technology as it became available.

This, in fact, is what has happened since FS (Future Systems), which IBM was

developing as a distributed processing approach to computing, was largely shelved nearly two years ago.

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## THE COMPUTER INDUSTRY V

## Europe back in contention

IN THE organisational talks have been held with Japanese Fujitsu. The European computer industry is in a stage of relatively reconstruction. Grand statements from Bonn that support will be phased out by 1980s (at one stage this read "by 1980"; the slip-page could be significant).

The government's new 1976-79 computer support programme has already shifted much of the emphasis towards the makers of small computers, such as Nixdorf and Kienzle, who had previously received very little help. The only surprising aspect of the German programme is that the proportion earmarked for software has not been increased. Philips, which receives no support from the Dutch government, has restructured its operations for a new thrust in office systems and terminals, and its Data Systems division may break into the black during 1977-78. Philips, too, has to bring new products to the market if it is to maintain its momentum, but it is on a rather shorter timescale than Siemens, aiming at 1979 at the latest.

Although best known for its stand-alone office computers, it claims to be the world's number three after Burroughs and NCR—its banking terminal work has given it a strong base for expansion into distributed processing. Philips' serious intentions towards office automation are underlined by its position in a widening range of office products from dictating machines to the latest arrival word processing. All these factors, plus its international marketing strengths might make it an ideal partner for Siemens towards the end of the decade; close traditional ties between the two parent groups would also ease the inevitable merger problems.

ICL, meanwhile, is in a position midway between CII-HB and Siemens. On the one hand, it will be about two years before the outside world can tell whether it is exploiting the Singer acquisition to expand sales of its own product line. On the other, it is clearly following a policy of limited alliances where convenient.

The most obvious is the link with CDC and NCR in Computer Peripherals, and it could still adopt a similar approach to cover the entire range only supplied by its 7700

company's declared strategy to flank this "go-it-alone" strategy with co-operative links of a limited character, such products as microprocessors (with Intel), peripherals (various options) and large systems (difficult to part of its mini/microcom-

puter requirements. In the general shorter term, it still has to prove that it can persuade Europe's share of this EEC traditional customers to convert at a profit from the old into some of the constituent 1980 to the new 2000 range. It varies as follows: the early 1980s (at one stage this read "by 1980"; the slip-page could be significant).

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## Partners

Siemens' former partners in the U.S. have withdrawn to their national market. Philips has also taken a painful step out of mainframe computing, but both of them seem to have suffered short-term damage to their computer businesses. In spite of continued uncertainty about the future source of availability of the largest line in its range, Siemens continued to enlarge its market share at the expense of IBM (now up to 30 per cent) while at last going to start cutting its processing losses—which had been running at £40m. a year. Its medium-term strategy is now based on producing one or two medium-modular processors, which will be capable of being ped down or duplicated in order to cover the entire range only supplied by its 7700

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## How could the world's best small interactive computer system be improved?

The System Ten, developed by Singer Business Machines, is acknowledged to be the world's most capable small interactive computer system in its price range.

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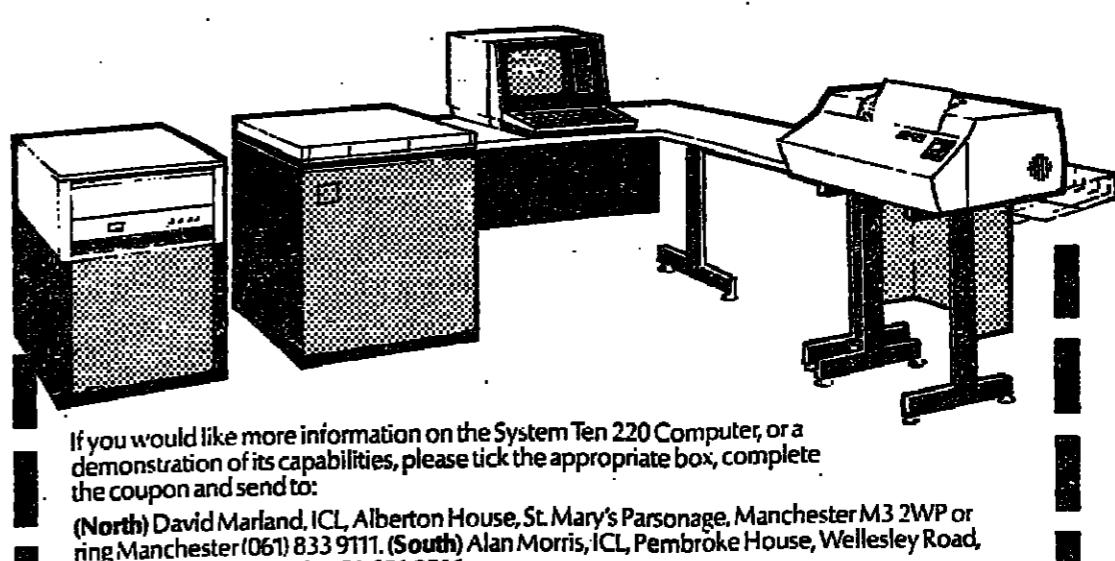
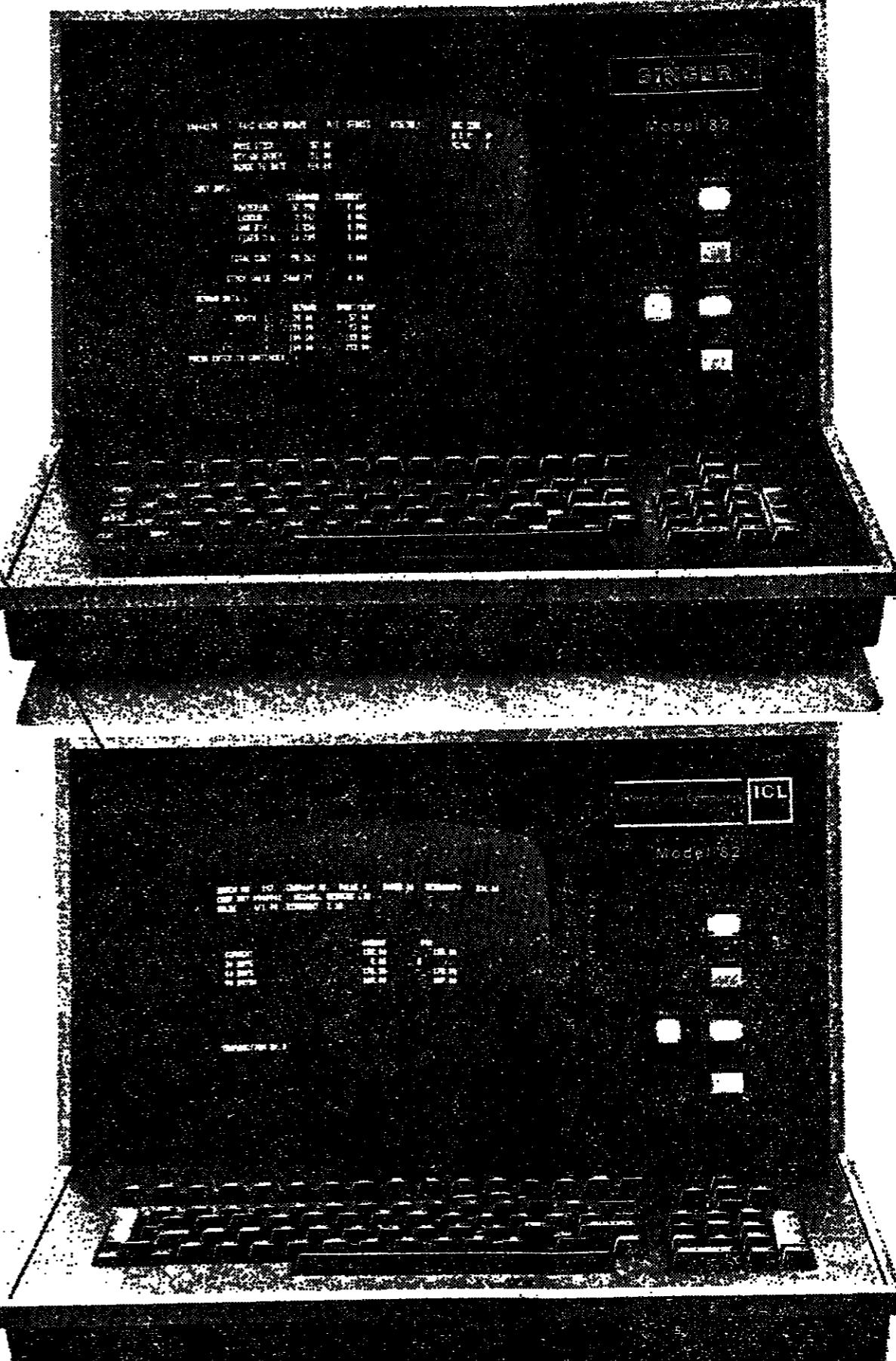
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**Dataproducts**

Christopher Lorenz  
Electronics Correspondent



If you would like more information on the System Ten 220 Computer, or a demonstration of its capabilities, please tick the appropriate box, complete the coupon and send to:

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more information  demonstration

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Company \_\_\_\_\_ Address \_\_\_\_\_



System Ten

Telephone: \_\_\_\_\_

FT 2



## THE COMPUTER INDUSTRY VII

D a Shops begin  
ch to cash in

UTERS ARE already a supporters within the super-established vehicle of market industry as a development for many of what could have as more sophisticated retail dramatic an effect on retailing. Supermarkets, like as the emergence of self-service, together with some techniques in the late 1950s, bigger wholesaling groups the likelihood of its becoming Linfood and Wheatsheaf a practical reality has, nevertheless, already have existed, seemed in danger of installations while some getting bogged down by lack of mail order companies, any real commitment from Littlewoods, have made those who would need to take substantial investments in the initiative.

As long ago as 1964, the little development has Neddy for distribution started to be behind the scenes, discussing the idea, but it was not until 10 years later, when the nearest thing the McKinsey report was published, that its feasibility was checked out. The demonstration with any real commercial cash registers in action. While the McKinsey report was not itself a very optimistic one, it did conclude that the system could provide the grocery industry with a net gain of around £13m. a year after it had been in operation for five years.

## Until British shoppers

see the electronic scanner-assisted check-out action are they likely to be behind the scenes, discussing the idea, but it was not until 10 years later, when the nearest thing the McKinsey report was published, that its feasibility was checked out. The demonstration with any real commercial cash registers in action. While the McKinsey report was not itself a very optimistic one, it did conclude that the system could provide the grocery industry with a net gain of around £13m. a year after it had been in operation for five years.

## Savings

The total savings for the retailer in Year Five, both in terms of "hard" gains like staff savings and "soft" savings like a theoretical increase in customer traffic, would be £33m. correctly over the laser "reading" point, press the button at the end of the scanner and hopefully the customers and, perhaps, pack the groceries kout assistants do in the States. even if such checkouts luce queues in super- consumers may need that this new de-

ment is really in their particular if, as hap- cost to the manufacturer might allocation and use of computer numbers for U.K. grocery manu- facturers. The bank should

price marked is the cost of holding stock may be up by the consumer greater.

In the States, where

McKinsey's carried out a similar

idea of computers at the

it has been one which

discussed with varying

terms of staff but here the span of only around two years, Pre-

both by some of to put the stress on inventory

carrying the bar code by 1979. The Article Number Association

tion about sales. This stress may be partly for the benefit of the British unions but in America, many checkouts are manned by two operators as against only one in England.

Publication of the report hardly seemed to engender any computing enthusiasm for the idea and it appeared for a time as if the impetus would once again be lost. But in the past month two things have happened that could turn the idea of computers at the checkout into a practical reality by the 1980s.

In Europe, the European article numbering association formally adopted a memorandum for the setting up of a system of article numbering throughout Europe and Scandinavia.

The Association agreed on a 13 digit code which is compatible with the 12 digit code already printed on the labels of many grocery products in the States. This means that, in theory, the doors are now open for the introduction of a system of marking products with a code which could be read by computer assisted checkouts throughout Europe and America. Once the scanner at the checkout had read the code, the store's own mini computer could translate this information about the product into the price at which the product was being sold in the shop, while at the same time registering its sale and adjusting the stock holding accordingly.

Meanwhile, in London, plans

were announced to set up a British article numbering bank which would co-ordinate the allocation and use of computer numbers for U.K. grocery manufacturers. The bank should

start allocating numbers on April 1 and it is hoped that

manufacturers will use them on their products as they change their labels.

As labels usually have a life

span of only around two years, this suggests that many big-sell

ing grocery products could be

carrying the bar code by 1979.

The Article Number Association



Computerised checkouts, like this laser scanning terminal in a Danish supermarket, are gaining popularity in Europe.

believes there is no real commercial advantage in installing a computer-assisted checkout until around 70 per cent of the products sold are carrying the symbol so there is unlikely to be any rush to buy the front-end equipment until about 1980.

British retailers are likely to follow the example of the American distribution groups and install the new checkouts in a few isolated stores on an experimental basis before making any major commitment to the new system. It could, therefore, be at least another two years before the new checkouts are installed on a wide scale.

The time scale could be dragged out further both by the reluctance of retailers to make the kind of financial investment involved and also, perhaps, by delays in getting equipment as, though all the major computer

manufacturers, like ICL, NCR and Sperry Rand, are interested in this field, they would be unlikely to build up vast stocks for the British market before the retailers had indicated some real interest.

Given the pressure on both manufacturing and retailing profits, it is not very surprising that there have been reservations about the new technology. Certainly, many companies see the system as a potential cost saver but however attractive these savings may be in the short term, the immediate problem is finding the money to be handled in 24 hours.

long term, the immediate problem is finding the money to be handled in 24 hours.

in the new equipment. This could produce savings for the manufacturers

as long as one retailer is savings for the manufacturers as well as retailers. There

peitors by exploiting these savings, the template is to put same need to send representations round stores checking on

stock levels, while companies from the manufacturers. In the past they have tended to see the more precise idea of how

system as having less in it for motions were working within them than the retailers. But the days of them being launched.

Even so, the ANA admits that there is not the same impetus for manufacturers to bar code

success there has been a useful boom in operating skills to be

exported and special system software knowledge.

The necessity of exporting bulk computing to the Continent seems to be limited in its view by the performance and tariffs of telecommunications links.

But even in America, computers at the checkout are still a rarity or at least those with the electronic scanning facility are.

The consumer lobby blocked any idea of savings which might result from abandoning individual price marking and for most groups the new checkouts are still at the experimental stage. At the last count only 122 supermarkets were using the new checkouts, though

some of the companies experimenting with them, like Giant, seem pleased with the results.

Elinor Goodman

## Attitudes

CONTINUED FROM PREVIOUS PAGE

future product development of Davey in graphics applications. Euronet services shows that it has been assured through the is not based on conventional flow of royalty payments from computing at all. Rather it is licensed operators such as at the information Aquitaine in Paris and IBM retrieval aspects of computing in Brussels.

The idea is to enable in a few years' time the entire body of professional workers in Europe to be up-to-date in working with Europe as a perfectly sensible market to be provided that contracts can be drawn up to satisfy the special currency factors involved.

Another bureau which has a high technical content in its computing base, and which has gone overseas is Atkins Computing Services. The interesting part of the Dutch branch of Atkins is that it has not found its main markets by merely following its multinational clients across the North Sea. Rather the Atkins skill has been to find new types of user and to gain from the fact that the going rates for bureau work are much higher in some form or other.

However far removed at first sight this seems from traditional computing practice the fact remains that the operation of Euronet involves the setting up of ordinary computing purposes. Indeed the telecommunications authorities of Europe are managing the setting up of the Euronet physical facilities and will eventually take over running it.

The U.K. Government has appeared in the Euronet act by forming Info-Line to explore specifically British services. The existing retrieval services in the new on-line computer based forms.

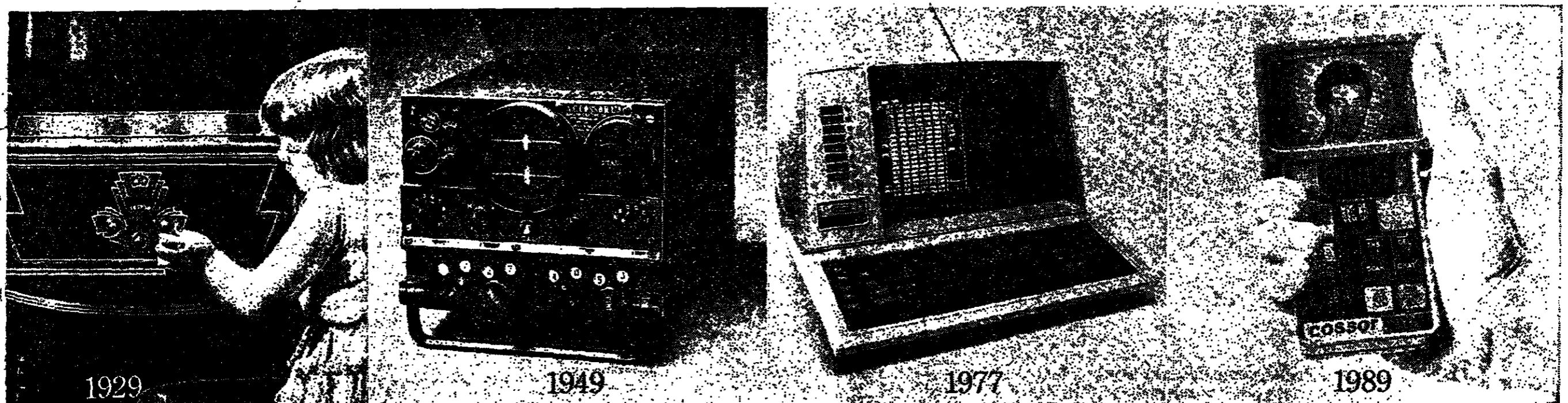
Commercial bureaux are active in the information retrieval field and Ranks Horwitz McDougall's subsidiary in computing has a deal with the British Library on just such on-line retrieval services using its skill as an IBM bureau operator and telecommunications experience using ICL terminal computers to provide experience of mixed equipment working in this field.

For now, the U.K. bureaux are afraid that governments may box them in from competing with the experience of the U.S. bureaux over networks serving all types of computing.

Since the tariffs for telecommunications costs are fixed by governmental influence throughout Europe there is only a limited amount of skill that can be brought to bear here to justify a special bureau offering of services.

In the ordinary run of business the British bureaux live by being very skilled operators and they would very much like to teach governments a thing or two in Europe about cost-effectiveness. However, they are unsure they will get the opportunity.

Hedley Voysey



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About that time, Cossor was

amongst the pacesetters in the birth of British TV. As the BBC began planning their first tentative television programmes, Cossor designers and engineers were working on the screens to carry the programmes—the exotic new technology of cathode ray tubes.

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It's the kind of logical development you can continue to expect from a group with 80 years experience in communications.

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## THE COMPUTER INDUSTRY VIII

## Dividends for the banks

PAPER AND PEOPLE are variety of terminals and cash vouchers—have to be physically expensive to handle and, dispensers is available to handle transported, encoded sorted although they are unlikely to most types of transaction, and even deposits can be performed automatically, although there is reason to believe that customers are far more reluctant to hand over to a terminal than to accept money from one.

A simplification? Of course. But consider the facts. Moving large volumes of paper about is costly, labour-intensive and consumes a great deal of energy. That is why postal services make a loss. But transmitting information electronically is inexpensive, is not labour-intensive and consumes relatively little energy. That is why telecommunications is booming and will continue to

Extend this argument to the world of banking and it is apparent that the cheque, which is after all only a means of conveying information, with no intrinsic worth of its own, is an inefficient instrument for transferring money from A to B, particularly when all the encoding, reading, sorting and handling operations to which it is subjected, are taken into account.

It is not cheques alone which clog up the works. People are a nuisance, too. They expect branch banks to be located on their doorstep, they congregate en masse during lunch hours, queuing at every available counter position to make withdrawals and deposits, adding to the flood of paper work and monopolising the time of the cashiers.

In fact, for the majority of transactions there is no pressing reason for customers to communicate with cashiers. A

## Activity

So far, the main computing activity in the highly centralised U.K. banking field has been the establishment of networks to enable current account information to be passed from branch banks to large computer centres for processing and automation of the cheque-handling function. With more than five million cheques being cleared each day from their own business, the "Big Four" clearing banks have already achieved substantial savings, not least through the establishment of their own inter-bank computer bureau—BACS—Bankers Automated Clearing Services.

However, in any situation where vast masses of paper—be it cheques or credit card sales

One has only to look at the situation in the U.S. where cheques, more than half of them for amounts of less than \$50 are being written at the rate of over 30,000m. a year, to realise that this gigantic paperwork cannot go on. Estimates that it costs a bank nearly 20 cents to process a single cheque drive home the message that the cheque's days are numbered.

But what will we put in its place? It is evident that only paperless systems will be acceptable, or indeed, economically viable, and it is thus not so much a question of whether electronic funds transfer systems will become a reality, as when this will happen and what services they will provide.

What seems clear is that many of the features which we attribute to EFTS will be incorporated in banking systems over the next ten years and that although the cheque will certainly not disappear overnight, there will be a decline in the use of paper instruments to transfer funds, as the scope of EFTS widens.

A key element in this transition will be the introduction of a multi-purpose card, similar to an ordinary credit card, but magnetically encoded with information relating to the holder, his current account balance, his

credit limit and so on.

Such a card will be used as a data required for payment and branches and 30 outside locations throughout England and Wales. However, Barclays and NatWest have both ordered NCR 770 on-line terminals which are capable of linking the bank's networks to a retailer's terminal, as well as setting up and operation of a separate network and a common account. It will be appreciated that we have a long way to go before the last of these services is provided. Standards will have to be agreed as to the data format of the multi-purpose card and the techniques to be adopted in encoding and reading it.

Telecommunications standards and protocols will have to be generally accepted if terminals at retail outlets are to be linked directly to banking networks.

## Answer

The answer is that the Big Four all have working parties to maintain separate networks or departments which are investigating the whole question of EFTS, and that some progress has already been made towards the adoption of a standard for magnetically encoded cards.

At an individual level the banks are all experimenting to varying degrees with terminals which provide more facilities for cashiers or which are capable of customer operation.

An alternative, albeit a more expensive one, would be for the banks to set up an entirely separate point-of-sale network, a good deal of the running not involving their own net-

works at all, in which all the terminals installed at 300

credit authorisation, would be stored. This would avoid the terminals which are capable of performing a wide range of operations including deposits, transfers and re-ordering cheque books, as well as acting as a cash dispenser.

However, such a development is no more than a subject for speculation at present and of more immediate consequence is the question whether the British clearing banks are really grasping the opportunities to achieve economies and improve efficiency which EFTS undoubtedly presents.

And the Midland Bank, which is taking a very positive line in its approach to EFTS, has carried out an experiment at its Canterbury branch to evaluate the effectiveness of EFTS techniques. At this branch all carried out an experiment at its Burroughs TD700 terminals for recording debits and credits as well as calculating currency conversions and handling enquiries.

Details of customer trans-

actions are transmitted directly to the bank's computer centre at Brent in North London. The scheme which is to be extended to other branches of the bank and expanded to include plastic card readers, has reduced the time involved in cashiers' end-of-day tasks by three-quarters of an hour, has speeded up customer enquiries, improved counter service and reduced paper work. All in all an encouraging forecast of the benefits which EFTS will bring.

Christopher Hipwell

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## Security and privacy

SAY "PRIVACY" to a computer user and he is likely to throw up his hands in horror at the prospect of the effort and expense which the word subject conjures up for him. Say "security" and he may look worried, but at least he is likely to admit that it is necessary.

Those differing reactions are instructive for, despite a great deal of loose talk, they do indicate that in this grey area, roughly delineated by the words computers / privacy / security, where high ideals, high technology and high costs overlap, the two issues of privacy and security are each perceived in a different light.

That at least marks a slight advance, for talking about privacy and security in the same breath has been of little benefit to either. The two are certainly not synonymous and as a general principle it may be said that the concept of privacy is intended to safeguard the individual, and that of security to safeguard data.

While effective security is essential if the privacy of the individual is to be upheld, security is not, in itself, any guarantee of privacy. Although the organisation which is holding personal data may safeguard it from loss, distortion or misuse by outsiders thus, on the face of it, ensuring the security of that data, that does not mean the organisation itself will not use the data in ways which may adversely affect the privacy of the individual.

This may seem self-evident but at the time when public debate and public pronouncements on privacy and security are virtually a daily occurrence, it is as well to bear these distinctions in mind. Indeed opinions are emerging—and hardening—after a long period of inactivity and complacency.

The issue of computers and privacy has been a matter for public debate in the U.K. at least since 1970, when a major two-day conference was devoted to the subject. After that little happened although the appoint-

ment of the Younger Committee on Privacy and the publication of its report in 1972 did stimulate further interest in the late cost and effort.

On supplying information to the person to whom it applies, however, the catalyst which is undoubtedly responsible for changing attitudes and growing awareness of privacy on the part of computer users, is the White Paper on Computers and Privacy published in December, 1975.

This provided for the setting up of a Data Protection Committee to gather information from interested parties and to examine the form which legislation on computers and privacy should take.

The White Paper also set out certain objectives which, taken together, constitute a comprehensive affirmation of the safeguards which the individual is entitled to expect when personal information is held in a computer system.

Safeguards

Certain of these safeguards will undoubtedly be expensive to implement and, not unexpectedly, it is the cost of complying with these probable features of future legislation which has proved to be the main area of contention when organisations like the British Computer Society, the Local Authorities Management Services and Computer Committee (LAMSAC) and the Data Processing Management Association, have made their submissions to the Data Protection Committee.

For example, commenting on the proposals that "the operator of the system should be responsible for ensuring its accuracy and relevance, and the subject of the information should be able to satisfy himself about this, which in many cases will best be achieved by inactivity and complacency.

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## THE COMPUTER INDUSTRY IX

## Education and training

PROPHECY that can be made about the computer is that our economic well-being will depend to a considerable extent upon the skill which we exploit computers.

The pressures that have the use of computers more and more British business, government and professional organisations during the last few years are intensifying new ones—notably, the rising cost of labouring added.

Crucial factor in the effectiveness with which we can meet the challenge in the short term is the quality and quantity of education we provide for tomorrow's managers, administrators and professionals. Of any real value, this recognises that computing is no longer an esoteric art to be used only by technicians. Laymen stand reverently on the sidelines, but a tool of personal use as an aid to day control, the exploration of new ideas and the assessment of future opportunities is dismissed as being inadequate.

John Harris, manager of ICL Education Region, is breeding a generation that is largely ignorant of management's most useful and indispensable tool. He says, an estimated 20 per cent. of the use of computers dedicated to education is used as an aid to the study of management subjects. In Britain, the present proportion is probably 5 per cent.

Often, says Harris, the business graduate's edge of computing begins with a short appreciation course and a few hours' introductory programming in English at a terminal. This superficial approach to more harm than good This aspect of computing ranks

## Abreast

One series will be designed to help technical people keep abreast of new developments.

The other will be aimed at such

people as managers in manu-

facturing industries and per-

haps, companies who are not yet

computer users, who need to be

convinced not only of the value

of computers but of the nature

of the contribution they can

make in specific areas.

One possibility the NCC is

considering in this connection

is the setting up of a subscrip-

tion service which would

function in much the same way

as a book club. This approach

has already been adopted by

another organisation for dis-

semination of information on

the legal requirements arising

from new legislation.

How soon the individual

engineer, doctor, accountant,

solicitor and other professional

will regard computer power as

indispensable will depend

on ease of use (which in turn is largely dependent on the power of software).

This aspect of computing ranks

## European supplier of computer terminals

Geveke Electronics offers a full range of quality terminals. Some names? Teletype Model 30 and Model 40 series, Diablo HyTerm and many other famous names are represented by Geveke.

All products are sold and serviced from the various Geveke offices.



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## Security

CONTINUED FROM PREVIOUS PAGE

puters were to be imposed the security-oriented system are the sky would indeed be the limit, as far as costs are concerned. Security, in the computer sense, is not just a matter of personnel policies and physical precautions—stopping disenchanted employees from stealing the computer tapes. It also embraces a host of technical factors such as operating systems, access controls, communications and data encryption all of which have a bearing on the overall security of a spic system.

A seminar entitled "Policy issues in data protection and privacy," held by the OECD, looked at these aspects of the security problem and a particularly thought-provoking paper by Rein Turn of the Rand Corporation examined the requirements which legislative proposals concerning computers and privacy are placing on the computer user.

Analysing the considerations associated with the design of secure systems, Mr. Turn identified the cost areas which must be taken into account in setting up protective systems as analysis and specification of security requirements, capital expenditure for physical security in the computer room, analysing the vulnerability of operating systems and implementing security-oriented software, design and coding of software for access control management, password generation, user identification, data encryption and audit trail recording.

They also included validation and testing of security-related systems software, operating systems, and access control routines, design and implementation of security regulations for data handling, programming and back-up and recovery procedures and reformatting of existing files to include security-oriented data fields.

Even more daunting than designing and setting up a

Laura Tatham

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COMPUTER

Nixdorf Computer AG, 4790 Paderborn

Christopher Hipwell

## THE COMPUTER INDUSTRY X

## Aiding the engineer

A FEW days ago, Lloyd's Register approval was given, mercial organisations will contemplate with any joy a need for a new analysis program or system of programs since some of these systems have taken 100 and key points can be moved around the screen (converging lines moving in concert) simply and also require constant effort to support and develop. Hence the appearance of a number of general systems offered by computer bureaux for shared use.

An example of facilities of this type can be found in the four general programs available at Sicon. Two are from the U.S., one from Norway and one from Britain. They are supported by some of the largest machines in commercial use, by close work with the originators and by constant exchanges with users—so the load is spread far more widely than in the case of self-developed systems. And this seems to be one of the areas where big is still beautiful since it would be very difficult if not impossible to harness a group of small machines to tackle such work.

## Weakness

The output of such analyses generally would show whether the design under study did or did not comply with codes, regulations and the engineering limitations of the materials it was proposed to use.

Any weaknesses in the design would be shown up immediately and it would be a case of "back to the drawing board."

But the drawing board could be, frequently now is, a display like a large TV screen on which which is not touched in some design has now been demonstrated after years of hard work, available at CAD and becoming locally available all over Britain through a number of bureaux/centres. The STAR network now covers Sicon, SIA and NEL and the CAD at St. Helens as well as CAD/Cambridge.

This mode of operating has been made possible by advances in computers and particularly of the instructions, or software, which constrain them to operate in certain useful ways.

Harnessed in the way described above, the computer is assisting the design process, hence Computer Assisted Design, or CAD. First described as a possibility in Britain some 20 years ago, it was demonstrated publicly by Elliott-Automation about 12 years ago. And because the prospects of a man-machine dialogue in which the computer would call to the aid of the designer vast stores of information on materials performance and structural behaviour, while aiding him to project with economy and safety, it was so exciting that Britain set up a unique CAD Centre at Cambridge during the years of "white-hot technology."

Now, some seven years later and after the expenditure of approximately £20m, the CAD/CAM is still unique and has, quite rightly, survived an attempt to axe it on the grounds of Government economies.

The wealth of software and systems expertise accumulated over the years is hard to largest processing complexes.

While engineers' ability to evaluate in money terms. But there is hardly an industry which is not touched in some design has now been demonstrated after years of hard work, available at CAD/CAM and becoming locally available all over Britain through a number of bureaux/centres. The STAR network now covers Sicon, SIA and NEL and the CAD at St. Helens as well as CAD/Cambridge.

One of the most significant services the Centre has rendered computer-using industry at large is the work it has done to disseminate the Gino-F package which can be used on virtually any computer to produce a series of graphics (lines, arcs, etc.) and cause them to move around the display in a certain way—rotate, shift, shear, scale, etc.

When CAD is applied to mechanical engineering, once a part has been drawn to the designer's satisfaction, a tape can be produced which will drive numerically-controlled machine-tools which will make the part to specification.

GNC is the name of the Cambridge program to produce control tapes for milling machines, lathes, spark erosion machines, etc., and it will aid a designer to nest components on sheet metal for minimum waste.

Polsurf is another facility allowing control tapes to be made for complex 3D surfaces hitherto almost impossible to achieve by standard methods. CAD/CAM has recently perfected detailed pipework layout procedure which is suitable for the over the years is hard to largest processing complexes.

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Many of the foregoing developments would be impossible, or at the least far more expensive to achieve, without another form of CAD intended specifically to help electronics

designers to achieve the complex drawings of integrated circuits quickly, without error and with maximum interconnection economy. Work on circuit design

has been in progress in many

centres for years and many man-

years of effort have gone into

the writing of the software

needed to support the displays

but also to produce the tapes

which ultimately drive the

plotters making the finalised artwork.

It is again a British company which has carried out pioneering work in this difficult area and Redac (Racal) software packages are being used all over

the world for the fast and error-

free layout of complicated multi-

layer circuit boards.

In this particular area of modern technology, computing has probably come closer to an integrated whole than any other since users can conceive

a design, try it out for validity

under extreme conditions,

amend it and then get down to

detail work, providing as a by-

product the instructions for the

machines that will make the

components. It is gratifying

to national pride, if not yet to

the national purse that many

U.K. organisations and compa-

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## Robot technology

ALTHOUGH BRITAIN for a have to carry out punching in decade and more led Europe codes for start of movement, in nuclear power developments, change of plane, end of move and several British companies men etc. A very high degree were involved in the design and of repeatability has already manufacture of powered been achieved and it is possible manipulators to handle, behind as a demonstration feat, to thick walls of concrete and instruct the machine to perform leaded glass, materials too several three-dimensional movements, returning each time to a stems to have thought of the plane surface and exactly extra step towards developing an industrial robot to handle tracing out the same letter. Robots of this type are being hot and heavy objects.

This is all the more surprising since—at the time of maximum demand for remote control handlers—Ferranti's work on advanced machine-tool and co-ordinate measurement techniques was reaching its peak. For one reason or another there was not the necessary cross-fertilisation, or technology transfer, or perhaps manpower was too cheap, and even now U.K. industries that could handle high-class inert gas benefit from the use of robot welding of steel components machine servants in dangerous or unpleasant operations are tending to lag well behind their Japanese counterparts.

This is an interesting side-light on the fact that, in a large group of industries in Japan, including electronics, costs of production have crept up to U.K. levels. In Hong Kong they are still around half while in the Philippines, electronic and body framing has spurred assembly work is not expected ASEA interest. Unimation Inc. was set up 15 years ago in In Europe, Sweden's giant Danbury, Connecticut, holds 700 ASEA group is among the pioneers of robot development and has already is making considerable use of own products in various areas, including the company's casting shops. It has approached the work from the viewpoint of simplicity in use and has built the controller for its equipment around a micro-processor with a fair amount of memory. To set up a robot from two to six degrees of freedom of movement in the wrist has to do is to take the head and arm actions. Memory can be of the machine with its grippers specified to allow the machines through the sequence it will to carry out up to 1,024 separate

CONTINUED ON NEXT PAGE

## Robust

With ESAB, a world leader in welding techniques, ASEA has developed a version of its robots was too cheap, and even now U.K. industries that could handle high-class inert gas benefit from the use of robot welding of steel components which have to withstand extreme treatment, such as the connector unit which goes between tractor and trailer on a pallet—or reject them if they fail the test.

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مختبرات الاتصال

## THE COMPUTER INDUSTRY XI

## Minis and micros

**N**IN THAT it took the biggest French stake in the new CII-Honeywell Bull company, and Thomson got CII-B, the minicomputer arm as a consolation prize.

For the British and authorities to reach the conclusion, it is perhaps surprising that it took until for any European government to realise that there was to the computer industry mainframes.

Again the French were to see that while the same industry was mature in the minicomputer, peris and terminals sector, growing rapidly. Having

that he had no alternative to sell out the national constructed national

am manufacturers CII-Honeywell in return for a French majority holds the industry minister d'Ornano turned his on to the "peripherals" sector.

had been formed by together a number of French computer manufacturers, and unlike ICL in the which was specifically from the minicomputer market, CII inherited's for a mini, the Sigma 2 scientific Data Systems of

expertise developed in acturing and marketing machine was soon applied to the most successful European general-purpose computer, the Mira 15, which are now approaching 2,000 mark. (Dataspeed manufactures its D5 at a faster rate, but these are almost all used in terminals, whereas 15s are used in the full of mini applications, from hospital automation educational systems to switching of data in ne networks and control refinery processes.)

ng ceded its mainframe to Honeywell, the steps and each routine can be junction with large plastics in what to do with this change-over on a production line. The handling a multiplicity of jobs.

Sequences of movements are taught to the machine by taking ability to spin heavy loads, at electronic conglomerates it step by step through them controlled speeds when the and the company has recently primary wax models are being brought out an Editor unit coated with the ceramics that which allows users to make fast, will ultimately form the minor positional changes to a moulds. Positional accuracies of 0.06 inch are achieved.

strongly favoured the small solution for CII sequence stored in memory. Thomson wanted the unit is actually working.

Thus when the company in CII was car production lines, handling up, CGE ended up with castings and operating in con-

The German Government's awakening is almost certainly too late. Although Germany has Europe's largest office and small business computer company in Europe in the form of Nixdorf Computer, it now has only one general-purpose minicomputer.

## Policy

Despite government neglect, Britain has more minicomputer than any other European country. There is no "buy British" policy to bolster the minicomputer market, and as a result only Ferranti, in the rather narrow field of process control, can be counted a real success. Britain has an almost exact counterpart to Dietz in Computer Technology, CTL, which makes large general-purpose minicomputers which have achieved considerable technological success, notably in the medical automation field. But in 1975-76, Computer Technology's turnover of about £4m showed no growth at all, which meant that it fell even further behind its American competitors. The company is now profitable, however, and if there were any real enthusiasm for European co-operation, it would be logical to bring Computer Technology and Dietz

Both companies are following a rapidly-growing trend within the mini-computer market, that of building up small business computer systems around the general-purpose mini processor in competition with the office computers of Burroughs, NCR, Phillips and Nixdorf. Computer Technology's new 8000 series is aimed almost exclusively at the

business market, and the Dietz its logical conclusion, allowing 621 is now also being designed for business applications.

It is a small miracle that tiny at all, and is extremely modular. Digico, the other independent British company dependent exclusively on the mini-computer, in a wide variety of simple and last year celebrated its tenth complex processing units. But anniversary, Digico has a turn. Locus-16 was developed for the over of about £1m, and is also very specific task of radar processing, and so far, nobody has market, having achieved some thought to exploit its potential success in laboratory automation and greyhound race-track betting systems.

It is clear therefore that with the possible exception of France, Europe's minicomputer makers are either too small to make a noticeable impact on the world market, or only exist because a big company wanted an internal source of small computers for its own use.

Does it matter if British systems houses like Arbat go to DEC for the processors in the advanced financial systems they sell to U.S. banks? Does it matter that the EMU brain and body scanners, almost all of which go for export, incorporate Data General minicomputers, made in the U.S.? Does it matter that the Post Office's automatic mail sorting equipment is built around Hewlett-Packard minicomputers?

IBM certainly think the minicomputer market worthwhile for last November it announced its first venture into the field with Series 1. It can be argued that the minicomputer makes up only a very small part of the value of each of the products mentioned, and that anyway the arrival of the microprocessor means that the days of the minicomputer are numbered.

If that is true it is indeed fashionable concept of "distributed processing" — putting small amounts of computing power where it is needed, rather than centralising it. Locus-16 takes the concept to

T. R. Palmer

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## Robot

CONTINUED FROM PREVIOUS PAGE

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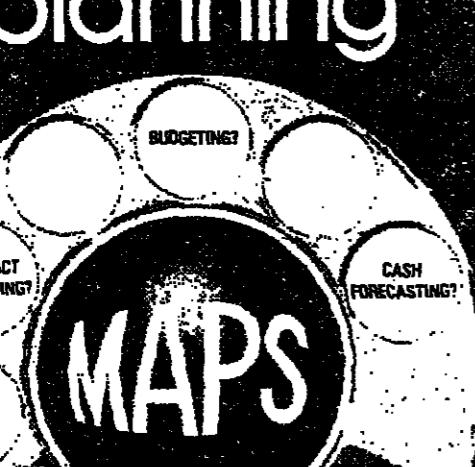
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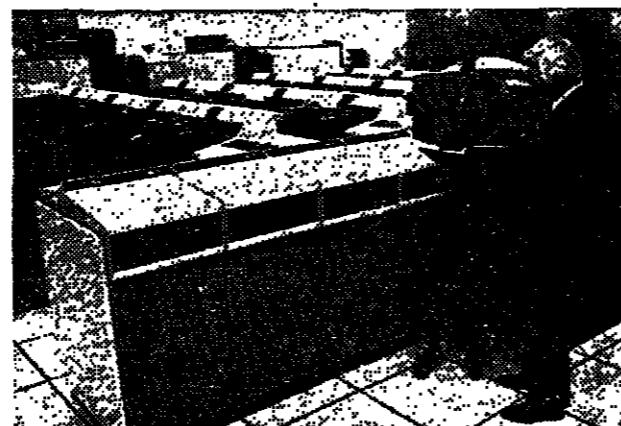
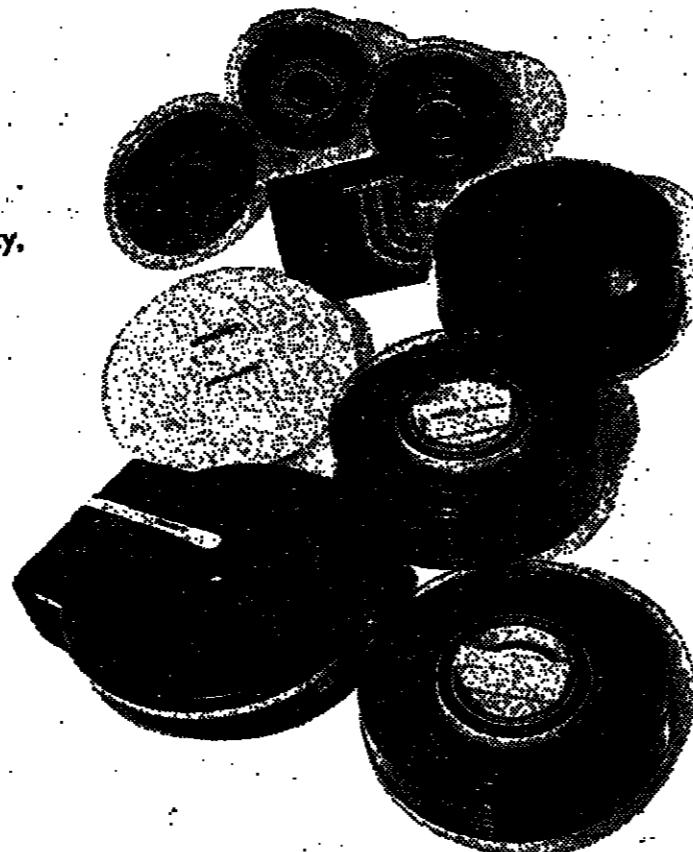
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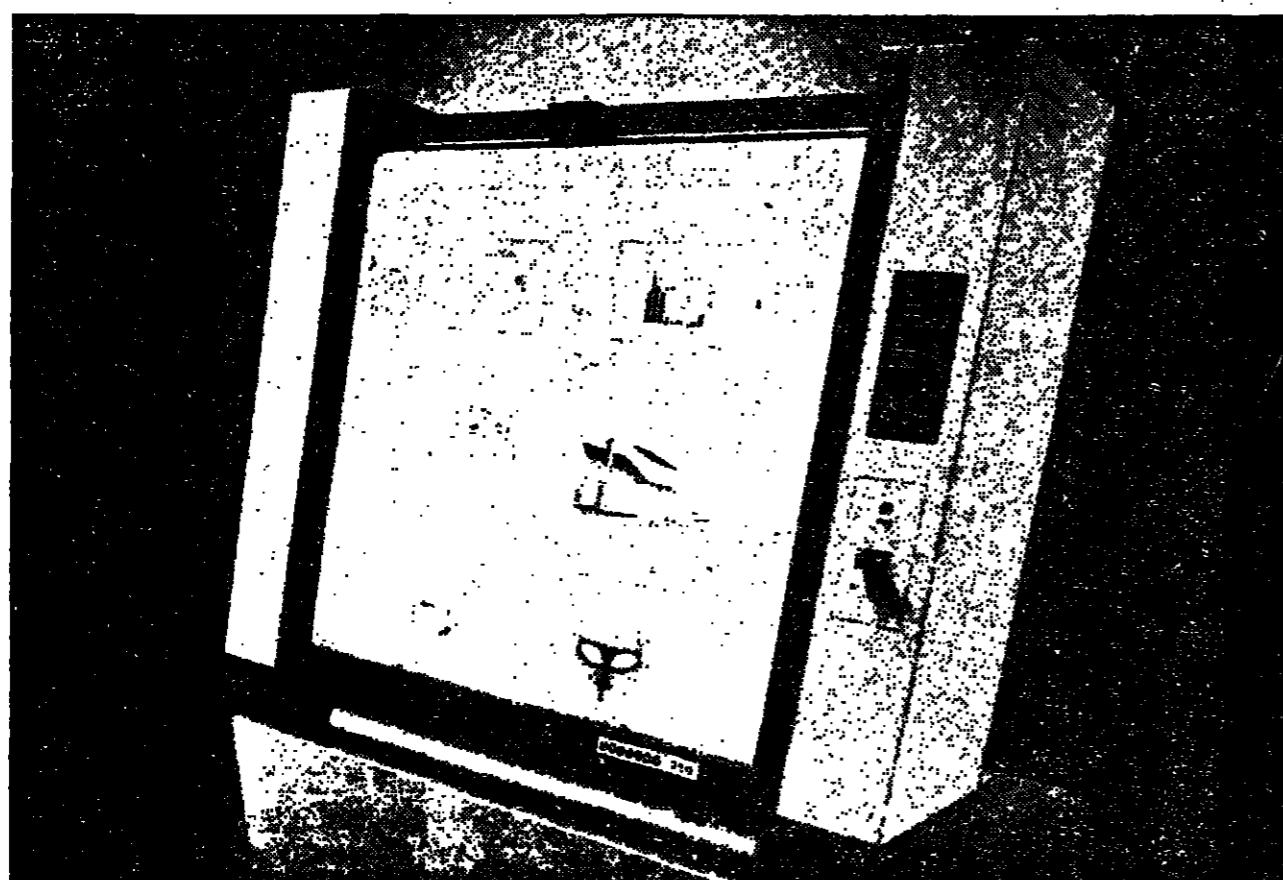
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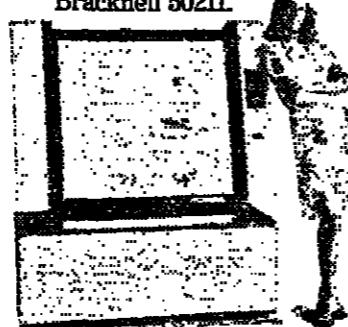
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# CALCOMP

# Software changes its style

B. J. (Barney) Gibbons, a business/office sector, not all of director of CAP, the big U.K. concern being used as computers, software house, clarified the problem of microprocessors for them estimate will be going into me well over a year ago. We were walking around a micro component parts, replacing and/processor exhibition, and he adding to existing capabilities. remarked that it took him back to his early days in computing. Here were all these engineers with their fascinating new toy "re-inventing computing as if it did not exist."

He claimed not to have done any programming for years, but he thought he could program these, for as they stood one was back in the days of machine code and "making it up as you went along". He did not think that would continue for long.

It is hard to credit it, but as little as eighteen months ago people thought of the microprocessor mainly as a systems component, and not potentially as a computer in its own right. Indeed, one microprocessor manufacturer even had a Press officer who did not send his releases to the computer Press because he did not think they would be interested.

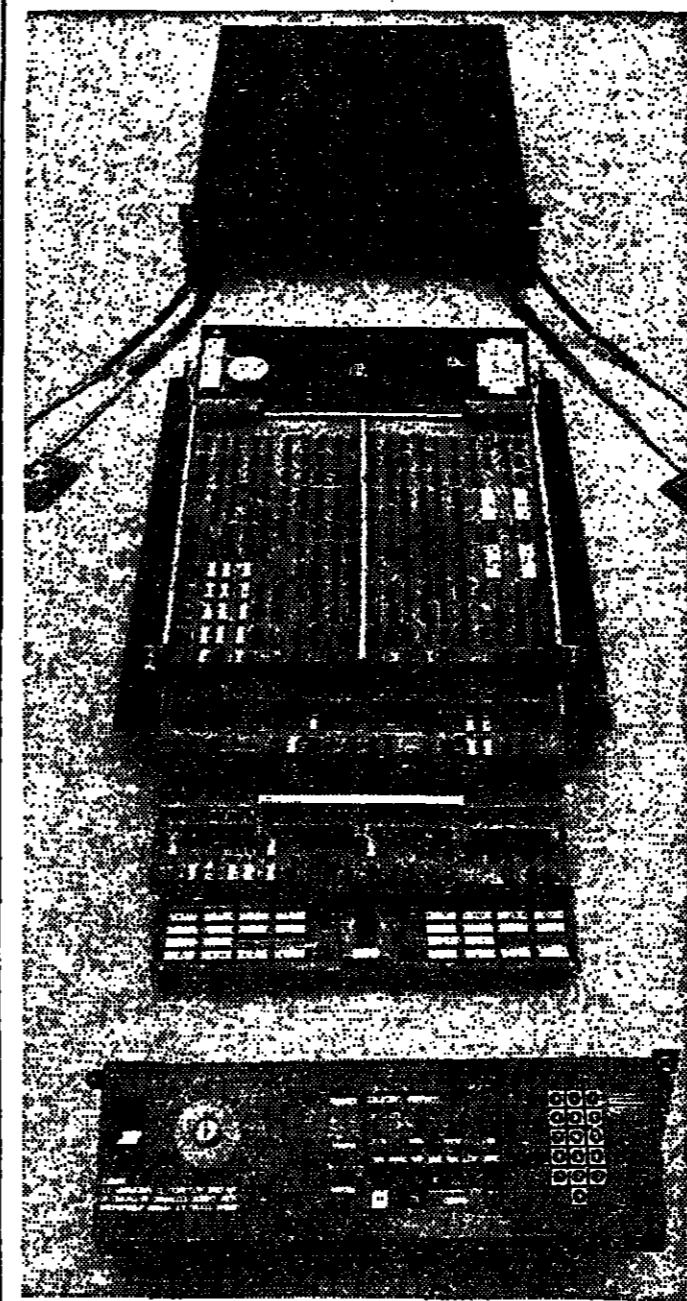
First, though peripherals prices are declining, they show

no signs of declining at any similar rate, and in terms of total hardware costs, peripheral is much more recent, at least on this side of the Atlantic. Because of this, and the lack of past historical data to establish trend lines, the forecasts are very varied. However, there is general agreement among the forecasters that the microprocessor will have moved into three areas in a substantial way by the early 'eighties. The areas are consumer electronics, cars, and computing.

Secondly there is software. As a rough figure total user costs, however paid, involved in putting together a general purpose computer installation from one of the conventional mainframe manufacturers, split roughly 50/50 to hardware and software.

Indeed the very existence of the microprocessor may lead to a sharp jump in storage demand. Secondly there is software. As a rough figure total user costs, however paid, involved in putting together a general purpose computer installation from one of the conventional mainframe manufacturers, split roughly 50/50 to hardware and software.

Perhaps the most useful of system component, the microforecasts to use, in large computer, however, forms the part because they are the most heart of a computer system and conservative, are those produced by the consultants Macintosh the ratio on the same basis is International, and Iann Barron at the least 20 to one, 20 for who edits their publication, software, one for hardware, Microcomputer Analysis. They It is obvious that at this level, calculate that by 1980, the 13 the economics of writing software European market will ware for microcomputers will be taking some 2.5m. units a demand that specialists and year (as against the 1.35m. enthusiasts apart, the user will going into consumer electronics expect standard solutions as part and the 900,000 going into cars), of the package, and that the Just over 20 per cent. (520,000) options initially will be of those will be bound for the limited.



A far cry from the room full of equipment that was a "small" computer 10 years ago. This is an exploded view of Honeywell's new Series 60 Level 6 model 6/36.

It is also obvious that the creation of software for microcomputers is going to be left to contrast, seems to be fixing the software professionals. Naturally, the manufacturers commercial data processing will do some—do some and its replacement is already. But theirs will be standard areas by microcomputers, standard solutions for the mass do this because it claims market. One of the key things have made a breakthrough to understand about the microprocessor is that it is a device of great generality, and that which is in advance of the few people are likely to use it.

The technique consists resources to tailor one to their using other computers on requirements, many are likely to try to tailor small numbers to their requirements, for instance in thirty or forty microcomputers in a distributed computer network, each doing the same tasks.

## Microsystems

Thus Comshare have just set up a technical research group to develop microsystems to enhance their existing network, and are envisaging putting them in their computer centres and remote offices.

The real question of interest to the user however is can the computer services industry, particularly the software houses develop tools and techniques to bring down the costs of programme preparation. Indeed make it almost programme manufacture.

Certainly, some of the software houses believe they can. Two companies have made announcements recently, and there are others claiming, if not quite so loudly, to be in the field.

Zeus Hermes, a software house, has announced its MICRO Z division and offers a service which runs from providing application software to the provision of a complete microprocessor system, both hardware and software, specially tailored to the clients' requirement. Their services are aimed initially at the electronics engineering field, commercial data processing, the mass device manufacturer market—washing machines and the like, and the hobby market, which is a very sizeable market already in the

Rex M

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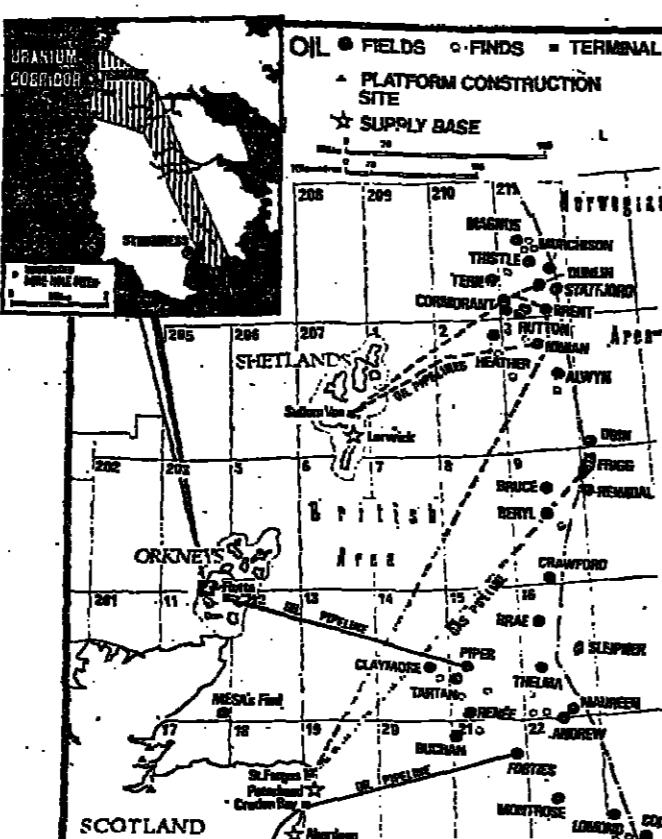
# Orcadians versus the uranium hunters

By RAY PERMAN, Scottish Correspondent in Stromness, Orkney

KNOW they are asking what could be in Britain's energy as the questions asked in during Shetland five ago over oil. For over 60 the two island communities less than 20,000 population, living from fishing farming, have faced upheavals on a scale that have overwhelmed fragile economies—masses of troops and securing two world wars and destruction of large oil terminals at Flotta and Sullom

two island communities for, and obtained, untried powers through acts of Parliament to the pace and the era of oil development. The building up large accounts with payments by the oil industry against when the boom ends. Orcadians are independent anxious to preserve their way, and now they fear a proposal by the South Island Electricity Board to 11 test boreholes in has recently become as the "uranium corridor" would be the start of a which will sooner or destroy their traditional life.

That has provoked united action and protest unknown, and is far more than anything that the oil companies. Orcadians are inevitably impressed by the way the islanders have set the damage the oil could have done, but it is regarded entirely firmly. It from being controlled own legislation, the oil was giving us in that was a positive " says Mr. Graeme, chief executive of One doubts whether there is no point in allowing exploration. The full council will be any benefit to the meets on Tuesday and is bound first many people knew of the scheme was when the Board is



"No attempt has been made likely to appeal to the Secretary by the SSEB to explain. Those of State for Scotland against folks who believe that uranium is dangerous can't get any answers. There was no one to tell them whether it was safe or otherwise."

The planning committee of the Orkney Islands Council proposed by the first protest march to be seen in the islands since the Campaign for Nuclear Disarmament has already firmly rejected the Board's application on the grounds that it would never allow mining so

far. So far the SSEB has done little to convince anyone. The cession by talking to the planning committee about the types of mining and perhaps even the necessity for uranium production in Britain at all.

"If we are going to be sacrificed, they must convince us that it really is in the national interest," says Mr. MacInnes, deputy headmaster of Stromness Academy and an outspoken protester.

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announced that it possessed signed agreements from 40 farmers and intended to apply for planning permission. The rest of the community, particularly in the second largest town of Stromness, which lies at the southern end of the "uranium corridor," feel that they ought to have been consulted rather than presented with what looked like a *fait accompli*.

It is clear, too, that at least some of those who signed did not fully understand the implications of what they were doing, although the document was explicit and some farmers consulted solicitors. Following similar requests over the past few years from the Institute of Geological Sciences, which first found uranium, and Rio Tinto Finance and Exploration, which also did some prospecting, some signed automatically, hardly pausing to consider the clause which gave the Board options that could enable it to buy their entire farms.

Under the agreements they were paid 25p an acre for the options.

"A derisory sum that smacked of giving strings of beads to the natives of Fiji in 1970," said Mr. MacInnes. "I think most of them signed without reading the form," said Mr. George Burgher, area secretary of the National Farmers' Union.

The union is angry that the Board did not follow the usual practice of public undertakings of negotiating wayleave consents collectively through possible health risks involved.

It is against environmental arguments like these that the Secretary of State will have to balance a counter view of the national interest. The SSEB, like its neighbour to the south, the Central Electricity Generating Board, already has nuclear commitments, and is concerned to investigate all possible sources of fuel supplies.

It has two nuclear stations, Hunterston "A," a 300 MW magnox, and Hunterston "B," an advanced gas-cooled reactor (AGR) station which should be producing around 1,000 MW by the end of the year. A third power station is being planned for Torness, on the east coast of Scotland.

But the Board does have

of mining and milling, the risks from radioactivity and dust and the precautions that might be needed to isolate waste materials left behind.

This last has raised considerable concern. The "uranium corridor" connects some of the most scenic countryside in the islands. Stromness is a former whaling port and now a picturesque one-street village. Yesnaby, at the northern end, has spectacularly rugged cliffs with characteristic Orkney stacks—high towers of rock that rise out of the sea. A wartime road makes it easy for tourists to get right to the cliff edge.

The prospect of a pile of radioactive waste, fenced and guarded with the public kept 200 yards away from it, does not inspire confidence in the continued growth of the important summer trade. Another fear, voiced by the NFU, is that however safe mining operations might be, there could still be a reaction against Orkney farm

produce.

The Orkney Area Medical Committee, representing doctors in the islands, also voted last week to support the council in opposing mining because of possible health risks involved.

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Following the Institute of Geological Sciences' report, the SSEB is investigating likely deposits in Orkney, Caithness and Kincardineshire. The Board

stresses that it needs the information from the Orkney boreholes before it will know whether there are commercial deposits on the island or not.

It has been estimated that there could be a few thousand tonnes of exploitable uranium

in Orkney. Mr. David Lea, field officer for the Royal Society for the Protection of Birds, is convinced that if and all three stations running at full capacity, mining is likely to follow.

He quotes from the Department of Energy's Energy Paper 11 (HMSO 1976) to show the possible pressure on uranium supplies if the present nuclear programme is continued. On this subsidy by drawing on their oil disturbance funds. They fear the situation could change if an elected assembly with a majority of lowland Scots, meeting in Edinburgh, responds to the political pressure from their constituents to ease the problems of deprivation and economic decline in the south or so, but a tight supply situation could develop thereafter.

Later, it adds: "The rate of discovery required to keep pace

of London, visiting Ankara and Istanbul.

**PARLIAMENTARY BUSINESS**  
House of Commons: Coal Industry Bill, second reading. Covent Garden Market (Financial Provisions) Bill, remaining stages.

**OFFICIAL STATISTICS**  
Preliminary estimate of gross domestic product based on output data (fourth quarter).

**COMPANY RESULTS**  
Marchwi Holdings (full year). Provident Financial Group (full year).

**COMPANY MEETINGS**  
See Week's Financial Diary on page 28.

**To-day's Events**  
strategy of national strike sugar-pricing talks with EEC and sugar meeting in Barbados.

Mr. Pierre Trudeau, Canadian Prime Minister, begins two-day visit to Washington, during which he will address joint session of U.S. Congress.

Mr. John Silkin, Minister of Agriculture, opens fourth session of UN Food and Agriculture Organisation's inter-governmental group on tea, London.

Dr. Donald Coggan, Archbishop of Canterbury, leaves for tour of Australia and New Zealand.

Sir Robin Giletti, Lord Mayor of London, visiting Ankara and Istanbul.

**Abbey National present SUPER RATE**

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# COMPANY NEWS

## Mentmore Manufg. exports over £1m.

Exports by writing and instrument manufacturers, Mentmore Manufacturing Company, in 1976 exceeded £1m. for the first time, against £0.81m. Forward orders, at present on hand, are in excess of £300,000 and the target for the current year is £1.25m. Mr. Christopher Andrews, the chairman, states.

Mr. Andrews adds that, following the big downturn during 1976, the home market is now starting to look more buoyant. Orders so far in the current year are running ahead of last time.

At the half-year on July 31, 1976, total sales showed a slight decline to £3.42m. (£3.35m.) with exports lower at £0.4m. (£0.3m.). Taxable profit slumped to £59,346 (£23,514), but the directors anticipated a marked improvement in the second half over the first six months.

Australia, Scandinavia and the Middle East, which together account for 70 per cent. of total exports, all showed a significant increase in sales during the year, and new markets were opened in Japan, Canada, Iran and Egypt.

The company's share of the U.K. export market for fine-cut tapes expanded from 35 per cent. to 74 per cent. with a rise in unit sales from 4.65m. to 13.3m.

## Reliance Knitwear prospects

WHILE IT is too early to forecast the results for the year to April, 1977, the directors of Reliance Knitwear Group will be disappointed if second half results fall short of the first half profit of £884,000 before tax, states Mr. R. E. Newman, chairman.

At present the company has

good order books but 1977 poses

so many problems for the British economy that it is difficult to be

other than cautious about the calendar year as a whole.

However, the directors have taken a number of steps over the last few months to protect the group from the worst effects of a significant reduction in the level of home demand and they believe that Reliance is in a sound position to weather the storm if it comes.

The interim figures, which show a recovery from a loss of £56,000, were announced recently. At the time the directors said that if expectations were realised the maximum permitted dividend total will be paid. Last year's payment was 1p net.

## SENA SUGAR

The Board meeting due to be held by Sena Sugar Estates on February 17 was cancelled because of the absence of various directors overseas.

### BOARD MEETINGS

The following companies have notified Trust, Prudent Financial, St. Andrews Trust, Watford Glass Exchange. Such meetings are usually held for the purpose of considering dividends. Official indications are available whether dividends concerned are interim or final and the sub-divisions shown are based mainly on last year's figures.

TO-DAY

Interim: AEGE Properties, Footwear Industry Investments, Jemex, Finsbury, Anglo-American Corporation of Canada, Chancery, Bovis, and J. H. Bradie, Drayton Far Eastern Trust, English and Scottish Investors, Marchwell, New York and Garment Investment.

Feb. 24 Feb. 25 Apr. 5 Mar. 22

Capital: Chartrons Industrial, Cape Alman International, Downham (G. H.), Mitchel, Coast Transport, Thames Plywood Manufacturing.

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# Businessman's Diary

## U.K. TRADE FAIRS AND EXHIBITIONS

Title	Venue
Mar. 6 Indian Electronic Components Exhb. (cl. Mar. 31)	28-30, Cork Street, W.1
Boat and Leisure Life Show	Nat. Exhb. Centre, B'ham
Mar. 4 International Men's and Boys' Wear Exhibition	Earls Court
Scottish Engineering Exhibition	Glasgow
5 National Stamp Exhibition	New Horticultural Hall
26 Quality by Design Exhibition	Design Centre, S.W.1
11 Scientific & Laboratory Equip. & Supplies Exhb.	Nat. Exhb. Centre, B'ham
11 Licensed Hotel Catering Exhibition	Metropole Centre, Brighton
Apr. 2 Daily Mail Ideal Home Exhibition	Olympia
17 National Carpet Fair	Blackpool
17 Industrial Security Equipment Exhibition	U.S. Trade Centre, W.1
16 International Packaging Exhibition	Nat. Exhb. Centre, B'ham
17 Temperature Measurements and Control Exhb.	Wembley Conf. Centre
25 Scottish Hotel, Catering and Licensed Trade Exhb.	Glasgow
24 Computermarket '77 Exhibition	Cunard Int. Hotel, W.6
24 International Tyre and Equipment Exhibition	Earls Court

## OVERSEAS TRADE FAIRS AND EXHIBITIONS

International Food Fair (cl. Feb. 23)	Brunn
Motorcycle Exhibition (cl. Feb. 27)	Brussels
International Toy Fair (cl. Feb. 25)	Valencia
Lat. Technical Fair of Textile Machinery (cl. Feb. 27)	Barcelona
International Boat Show	Zagreb
International Spring Fair	Stockholm
Int'l. Electrical, Electronic and Automation Exhb.	Bilbao
Hotels, Caterers, Bakers International Exhb.	Bologna
International Spring Fair	Hamburg
International Agricultural Show	Utrecht
Spring Clothing Fair	Paris
International Footwear Fair	Belgrade
International Spring Trade Fair	Eida
Int'l. Construction Machinery Fair	Vienna
British Industrial Exhibition	Munich
International Motor Show	Caracas
Apr. 2 British Export Fair	Geneva
Petrochemical and Refining Exhibition	Tokyo
	Houston

## BUSINESS AND MANAGEMENT CONFERENCES

CBI: French Language Law for Exporters to France	CBI Council Chamber, S.W.1
New York Univ.: Euro-American Commodities	London Hilton, W.1
Trenton: Advertising and Marketing Conf.	Cunard Hotel, W.6
CBI: Business Opportunities in Kuwait	CBI Council Chamber, S.W.1
Concrete Soc.: Middle East Construction	Newcastle
Interface: General Man. Practical Statistics	Post House, Reading
Financial Times, Investors Chronicle, The Banker,	Royal Lancaster Hotel, W.2
The Future for the Euromarkets	
Welsweiler Adfor: Exchange Control	The White House, N.W.1
MCE: International Company Lawyers' Conference	Portman Hotel, W.1
WTI: Finance of Exports	Queen Mary College, E.1
ILP: Overseas Earnings from Outward Licensing	Comnought Rooms, W.C.2
Frank Jenkins: Maximising Press Coverage	Royal Garden Hotel, W.8
Manufacturing Optics Int'l: Ophthalmic Symposium	Metropole Hotel, W.2
BT: Productivity Council: Organising Conferences	Clive Hotel, N.W.3
Mar. 4 IPM: The Management Development Process	Munich
Mar. 1 Financial Times, Institut des Wirtschaftsprüfer in Deutschland e.V.: European Tax Conference in 1977	

Mar. 4 P-E Cons. Group: Statistical Quality Control	Training Centre, Egham
Lancs: Corporate Man. Dev. in Local Government	Manchester
CENREC: Agriculture and Frozen Foods	Britannia Hotel, W.1
ICMA: Industrial Relations	Moor House, E.C.2
Interbank Research Org.: Finance Houses	Royal Garden Hotel, W.8
Forbes: Consumer Affairs—Threat or Opportunity	Heathrow Hotel
1 Kepner-Tregoe: Decision Making for Senior Man.	Bristol
Eng. Emp. Assoc.: The Law and the Supervisor	London Hilton, W.1
RACIE: Situation Report Conference	Leicester
MTS: Successful Office Supervision	Ch'rs Acc'ts Hall, E.C.2
Inst. Chartered Accountants: Exchange Control	Leamington Spa
Solihull Staff Ag: Recent Employment Legislation	Slough
Urwick: Conditions of Contract	Manchester
Shirley Institute: Energy Savings in Textiles	Rome
Financial Times, La Repubblica, Alitalia, Investors Chronicle: European Business Forum	Cheltenham
Wales International: General Management	Rugby
Dunchurch Ind. College: Project Management	London Hilton, W.1
IBA: Financial Communication in Industry	Carlton Tower Hotel, E.C.2
Henley: Consumers' Purchasing Power & Spending	Barrington House, E.C.2
Inbocor: Transactional Analysis	Sudbury House, E.C.1
Lon. Pr. Serv.: Social Security and Pensions	Birmingham
ICE: Research & Corp. Planning in the Chem. Ind.	Clifton-Ford Hotel, W.1
Assoc. Cert. Acc: European Taxation	Scarborough
District Heating Assoc. National Conference	

## week's Parliamentary business

Commons: Remainders of the Covent Market (Financial As) Bill. Motion on	base on Liberal Party motion
debate on security in Northern Ireland. Northern Ireland Order on consumer protection.	
Expenditure, Education, 1 Home Office Sub-Subj: Attainment of the school leaving. National Union of	the most powerful union
1. The Joint Four. 4.15 p.m.) Expenditure, General sub-Subj: Development of Civil Service. Wt. Mr. Edward Heath 4.15 p.m.)	secretary, and Mr. Larry Smith busman's national secretary.
OW—Commons: Unanimous, consideration of the motion on the Scotland-Wales Bill. Debate on the adjournment. Mr. P. Agee and Hosenball. Lords: to Animals Bill, regarding Deer Bill, reading. Select Committee. Subject: Nationalisation. Sub-committee. Subject: British Rail. Secretary of State for Transport (Room 8, 15.45 p.m.)	about 200 former RAF air and ground crew may be offered jobs by a U.S. owned aviation freight company which recently bought a fleet of 10 giant Belfast aircraft from the Government.
THURSDAY—Commons: Scotland and Wales Bill. Committee stage. Lords: Torts (Interference with goods) Bill, third reading. Patents Bill, committee stage. Short debate on the question of legislation to amend the Rent Act. Select Committees: Race Relations and Immigration Committee. Subject: Government assumptions about potential immigration. Witnesses: Home Office officials (Room 15, 4.15 p.m.)	The company, Pan African Freight Liners, will operate the Belfast—axed from the RAF as part of the defence cuts last September—on routes to landlocked African States.
“We may well be in a position to offer employment to quite a few of the RAF staff made redundant when the Belfast squadron was disbanded,” Pan African said yesterday.	“We are looking for about 200 pilots and technicians.”
A clause in the purchase contract forbids disclosure of the price for the 10 aircraft—the biggest bulk carriers of any European NATO airforce.	A clause in the purchase contract forbids disclosure of the price for the 10 aircraft—the biggest bulk carriers of any European NATO airforce.
Pan African, however, have insured the aircrafts for £1.1m. each and informed sources believe the purchase price was about £1m. apiece.	Pan African, however, have insured the aircrafts for £1.1m. each and informed sources believe the purchase price was about £1m. apiece.

## COMMERCIAL BANK OF GREECE BOARD OF DIRECTORS ELECTED

shareholders of the Commercial Bank of Greece, elected on January 19, 1977, the new Board of Directors, thus ending the status of Temporary Director.

new Board of Directors, at its first meeting same day, elected as top executives of the Mr. Evangelos AP. Eliades, until now for the Governors of the Bank of Greece, Mr. Achilleas Boundouvis, Governor of the Employment Organisation, Mr. Ioannis S. shipowner and Mr. George Hadjigeorgiou, in the Association of Tobacco Merchants Aloniki.

worth noting that as a result of the recent in the equity capital of the Commercial Greece, its total capital and reserves have d from Drs. 1,903m. (\$50.8m.) to Drs. 7,440m. n.).

## U.S. group may employ RAF men

ABOUT 200 former RAF air and ground crew may be offered jobs by a U.S. owned aviation freight company which recently bought a fleet of 10 giant Belfast aircraft from the Government.

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FRIDAY—Commons: Private members' Bills.

## TEHRAN. 10.30 NON-STOP.

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## LABOUR NEWS

### Hewlett-Packard plan may infringe pay policy

By OUR GLASGOW CORRESPONDENT

THE DEPARTMENT of Employment is to investigate a plan of Hewlett-Packard, the electronic manufacturers, to pay its 11,000 U.K. employees 13 months' wages this year, to see if the pay code would be infringed.

The U.S. company, which has policy criticised pay restrictions as being counter-productive, is to start paying its employees monthly salaries in advance instead of in arrears. On May 28, all staff in the company's entire workforce has staff pay code will receive their normal salary for this month. The following day they will get their it is not increasing salaries.

Hewlett-Packard intends to write off the extra month's pay whenever pay restrictions are removed, but the company says

Mr. Carmichael said their plans involved giving workers the use of their salaries earlier than normal. Once pay code is allowed, the company will return to the normal arrears method of payment. He pointed out that over the last few months the company has been losing more employees who are proving difficult to replace. “One engineer a month in our research and development section leaves the company to emigrate, and that is not good for the company or Britain,” he added.

Mr. Carmichael said the company's pay policy which the TUC that there should be an end to a pay policy which prevented payments for initiative and enterprise. It wanted to give incentives for skill or improving efficiency, and for rewarding creativity.

Last November, Mr. David Pocock, the company's president, told the international forum of the Scottish Council (Development and Industry) at Aviemore that the top of the company's profits

league which covers 27 plants throughout the world.

Mr. Peter Carmichael, South Queensferry plant manager, said their plans involved giving workers the use of their salaries earlier than normal. Once pay code is allowed, the company will return to the normal arrears method of payment. He pointed out that over the last few months the company has been losing more employees who are proving difficult to replace. “One engineer a month in our research and development section leaves the company to emigrate, and that is not good for the company or Britain,” he added.

The company says its lawyers have cleared the scheme with the Department of Employment. However, a Department spokesman said that officials would be contacting the company as its proposals appeared to be a device to evade the pay limits.

Hewlett-Packard employ 880 at their South Queensferry plant in Scotland, and another 400 and service staff whose combined efforts doubled profits last year to more than £2.5m. putting the U.K. division at the top of the company's profits

The unions are invited to attend the meeting with ER officials on Wednesday.

The unions have invited the Twentieth Institute of Human Relations to attend their meeting with ER officials on Wednesday.

The institute produced a report on participation on the railways six years ago, in response to a commission from the then Minister of Transport, Mr. Richard Marsh.

This study, based on an attitude survey of 2,000 railwaymen, will be used to strengthen the unions' case for reform at the lower levels, leaving the much more controversial argument about worker-direction to be hammered out as a separate item.

The unions are still awaiting the report of the Lord Committee on industrial democracy in the public sector, but the NUR at least is keen to set up a system in advance of Government legislation.

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The unions





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## FINANCIAL TIMES

Monday February 21 1977

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## Iran to cut defence spending

By Robert Graham,  
Middle East Correspondent

TEHRAN, Feb. 20. IRAN HAS decided to cut defence spending in order to come to terms with the reduced revenue expectations resulting from the two-tier oil price structure.

The cut of 2 per cent. was announced by Mr. Abdul Majid Majidi, the director-general of the plan and Budget Organisation, indicating what is nevertheless a record \$49m budget for the coming fiscal year.

The cut may be temporary, pending an upturn in oil liftings. Observers also believe that it is probably designed to convince the Carter Administration that Iran's military spending is not exaggerated.

Nevertheless this is the first time since 1941, when the Shah came to the throne, that he has agreed to trim expenditure on the armed forces.

Mr. Majidi said that originally the budget was planned to total \$3.5bn more but the sharp reductions in oil liftings last month prompted a revision of estimated expenditure. He said the Shah decided "at the last minute to cut the defence budget by 160bn. rials" (\$2.26bn), the remaining cuts coming from civilian expenditure.

The main military cuts would come in "many items related to the construction of naval and air bases" as well as procurement of hardware, he said.

## Review

A substantial portion of this cut could be accounted for by delaying the start on the Chah Bahar naval base.

Mr. Majidi emphasised that when the oil revenue picture clarified and OPEC prices normalised, the budget would be reviewed. If revenues increased from oil then defence items would be the first to be reinstated, he added.

Defence expenditure last year was \$8.1bn, equivalent to 27 per cent. of the general budget, and this year it will be \$7.85bn or 23 per cent. of the general budget.

Military projects are being shelved rather than axed, it seems and observers believe that a decrease in defence spending will lessen the problems of absorption which have become increasingly acute.

Oil revenues, projected to account for only 70 per cent. of total Government receipts, have been based upon a conservative assumption of liftings.

Mr. Majidi said oil take had been calculated at 4.6m barrels a day giving \$19.46bn (including a small amount for gas sales) against \$19.36bn for the present year ending March 21 with average liftings of 5.5m barrels a day taking into account a sharp drop in revenue in the first quarter of the new financial year due to delayed payments on crude purchases.

Because of reduced oil revenues, the Government for the first time in several years will resort to substantial domestic borrowing to the tune of some \$2.1bn. Public sector foreign borrowing will increase from \$1.2bn to \$1.4bn. Increased reliance will be put on improved tax collection with tax receipts rising 34 per cent.

## Oil revenues

Total foreign commitment will be no more than \$1.3bn unless oil revenues improve against \$1.4bn, earmarked in 1976/77.

● In the past year Britain has contracted to sell a substantial quantity of RFA ground-to-light missiles and 110 Scuders light tanks in addition to the 250 the Shah has already bought.

Yarrow Shipyards will build four 8,000-ton supply ships worth about \$90m, and Britain is to supply an undisclosed quantity of armoured recovery vehicles.

Initial work was begun by Richard Costain on a naval base at Chah Bahar, while an ordnance factory is being constructed by Laing and Wimpey near Isfahan.

This was the subject of intensive talks at the end of last year as the estimated cost had almost doubled to \$770m. At that time it was understood that the Iranian Defence Ministry wanted to lower the project cost to between \$450m. and \$550m. of which \$350m. would be exports from Britain.

## Governor gives Saudis details of new bonds

By OUR OWN CORRESPONDENT

## New Treasury moves to curb spending

By PETER RIDDELL, ECONOMICS CORRESPONDENT

THE DEFEAT in the Commons and withdrawal by the Government of a number of proposals to cut public expenditure have led to intensive discussions between the Treasury and other Departments to prevent potential over-spending in the coming financial year 1977-78.

The main problems have arisen over proposals from the Department of Health and Social Security, though there is also a possible difficulty over redundancy rebates within the Department of Employment's budgeted amount directly involved totals at least \$55m. in 1977-78, and more than \$50m. in the following financial year. In addition, requests are starting to come through for further spending above that laid down in the annual Expenditure White Paper published at the end of last month. A heated debate has, for example, developed within Whitehall about support for the shipbuilding sector.

This aim has been achieved with considerable success in the current financial year, but it could be as, if not more, difficult to succeed again in 1977-78 in view of the political pressures for spending in order to stimulate the economy given unemployment prospects.

## Pressures

The Treasury has repeatedly stressed its determination to keep spending within the limits of White Paper programmes and the contingency reserves—a specific sum to allow for additional expenditure beyond original plans—as well as within cash limits on money outlays.

Anyway, the amounts concerned so far are probably more than balanced by lower debt

interest payments resulting from both a smaller borrowing requirement and a faster decline in interest rates than originally projected.

This does, however, highlight the pressures building up on the White Paper targets even before the start of the financial year.

Mr. Joel Barnett, the Chief Secretary to the Treasury, and his officials are reported to be taking a tough line to ensure that any over-spending is offset by the Sun one spending Department is believed to be realistic cuts in its own area rather than elsewhere.

About £2m. has been off-set so far by cuts in centrally-financed health services, such as training and research.

The Department of Employment is deciding what to do after the defeat in the Commons by one vote on second reading of a Bill to reduce the rebate payable to an employer from the redundancy fund. This would have saved £13m. in 1977-78.

## Tories divided over next phase of wages policy

By CHRISTIAN TYLER, LABOUR STAFF

DIFFERENCES within the Conservative Party about the desirability of central control of pay rises were kept in suspense by the group's leader, Mr. Peter Walker, who is not in the Shadow Cabinet to widen.

Sir Geoffrey Howe, Shadow Chancellor, said that a sustained reduction of "Government overspending" and control of the money supply were necessary if inflation and unemployment were to be dealt with.

These were the real issues behind the talk about the next pay deal, Sir Geoffrey said, and he called on the Prime Minister and his colleagues to spell out more clearly the true meaning of a pay policy phase after July.

His speech in turn provoked criticism from the Selsdon Group of Conservatives which said it was "tragic" that some leading Tories were still arguing that inflation could be tackled by central incomes control.

Editorial Comment, Page 10

A statement from the group said: "Inflation is caused by Government overspending. Income policy attacks the symptoms rather than the underlying cause."

Meanwhile, on the trade union front, one of the biggest white-collar unions, the Association of Professional, Executive, Clerical and Computer Staff, lined up with those calling for a further pay formula.

APEX said there should be a general pay rise of 7 per cent. with a sum equivalent to 3 per cent. of each company's payroll made available for dealing with wage differential problems.

The National Union of Agricultural and Allied Workers said that low-paid workers' basic rates must be raised even while the higher paid were seeing their relative positions in the wage scale restored.

Editorial Comment, Page 10

## Labour pressure group formed to counter Left influence

By PHILIP RAWSTORNE

LABOUR moderates at the weekend formed a new pressure group, the Campaign for Labour Victory, in a determined effort to counter the growth of Left-wing influence in the party.

Mr. William Rodgers, Transport Secretary and a leader of the old pro-Gaitskell Campaign for Democratic Socialism, launched the movement at a London meeting on Saturday evening by manifesto Group MPs and attended by about 100 party activists.

Calling for constructive support for the Government and the party's mainstream of opinion, Mr. Rodgers said: "The outside right is as unrepresentative of the Labour tradition as the outside left."

But the meeting passed a unanimous resolution regretting the "negative attitude of the left-dominated National Executive Committee towards the Government and its neglect of party organisation."

Expressing concern at the loss of party support because of "present tendencies," Mr. Rodgers delivered a sharp attack on the NEC.

"It is certainly fair to ask whether the NEC speaks for the grass roots of the party," he said. "Despite recent overtures to the legitimate left" of the Tribune of peace, many people have the Group should not allow itself

to become a "Trojan horse for the Tories, but from the Labour NEC."

As the moderate campaign was being launched, Mr. Ron Hayes, the NEC's failure to rally round, the party's general secretary, at the time of the last party conference, was unforgivable.

Its claim to be representative is bogus. The so-called constituency section contains not a single "lay" party activist. The women's section is an anomaly.

Mr. Rodgers suggested that the NEC should have members representing both local government and the Parliamentary Labour Party.

But perhaps the most damning criticism of the present NEC, he added, is "its neglect of the party itself—its finances, organisation and members."

If the NEC put half the time and energy it devotes to public statements into perfecting the means to win elections, we should be infinitely better off."

He demanded: "How can we expect to succeed in by-elections—or in the county elections coming in May—if the voice of the NEC is constantly raised against our Government?"

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to become a "Trojan horse for the Tories, but from the Labour NEC."

## Three on Official Secrets charges

FINANCIAL TIMES REPORTER

THREE supporters of Philip Agee and Mark Rosenball, the Americans who face deportation, were charged under the Official Secrets Act last night.

Police said the three would appear at Tottenham Magistrate's Court this morning.

Meanwhile they were kept in custody at Muswell Hill police station, where they have been questioned.

A proposal to recoup from insurance companies the full cost of the National Health Service of treating road accident cases, also included in the July spending cuts, had to be dropped because of practical difficulties. This would have saved at least £2m. in 1977-78 and £4m. in a full year.

Only about £2m. has been off-set so far by cuts in centrally-financed health services, such as training and research.

The Department of Employment is deciding what to do after the defeat in the Commons by one vote on second reading of a Bill to reduce the rebate payable to an employer from the redundancy fund. This would have saved £13m. in 1977-78.

Almost half of the discussion period allowed by the Morpeth Steering Group following the publication of ED18 has now elapsed, and inflation accounting is in no danger of losing its reputation as a fiercely controversial subject.

As has been argued in this column before, ED18 is far from being a perfect solution to the problem.

But some of the criticism now being levelled at it goes beyond trying to strengthen its weak points, and could undermine the whole programme for introducing a comprehensive system of inflation accounting.

The other two are Mr. Duncan Campbell, a 24-year-old journalist and campaigner who lives in Brighton, and Captain Andrew, aged 31.

Mr. Campbell and Captain Andrew were brought to Muswell Hill police station on Friday evening after a meeting in Mr. Berry's house.

While they were at the station, Special Branch police searched Mr. Campbell's flat in Brighton. It is thought that the police inquiries relate to information on the detonation of terrorist bombs in Northern Ireland using radio, but the three were last night allowed to see their lawyers.

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